



Installation Manual

Version 6.4

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Jarrison Time Basic Requirements

Operating System:

Windows 10
Windows 8
Windows 7 (32 or 64 Bit)

Software:

Windows Installer 3.1
.NET Framework 2 and 4.7
SQL 2008/2012/2014/2016/2017/2019 or Express
*SQL data collation should be SQL_Latin1_General_CP1_CI_AS case insensitive

Hardware:

Celeron compatible or higher (1 GHz)
4 GB RAM or higher

Please note for JT Clock a direct Internet connection is required, and the following ports must be open: 58768 and 5277
These URLs will also need to be accessible from the server and user machines:

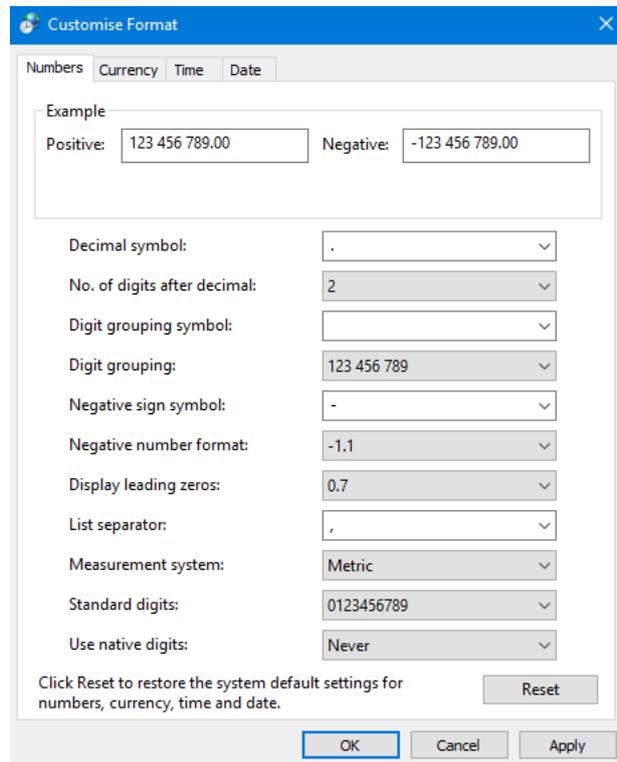
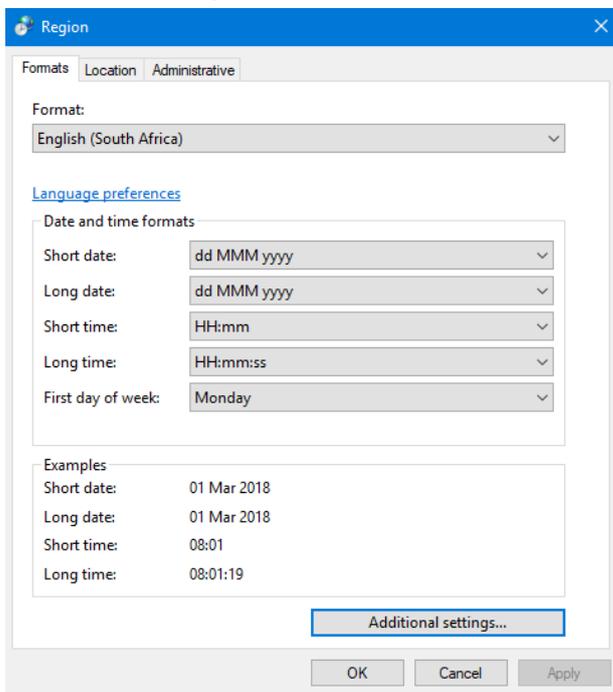
<https://bruno.jarrison.net:58768/api/Routing/GetClockRoute>

<https://maps.googleapis.com/>

8.8.8.8

Windows Regional Settings

Note that these settings should be applied for all Jarrison users. Ensure that your **Region** settings are set correctly from **Control Panel, Region**. The long and short date formats should match those shown in the **Formats** tab. Then click **Additional Settings** and check the decimal and list separators shown in the **Numbers** tab.



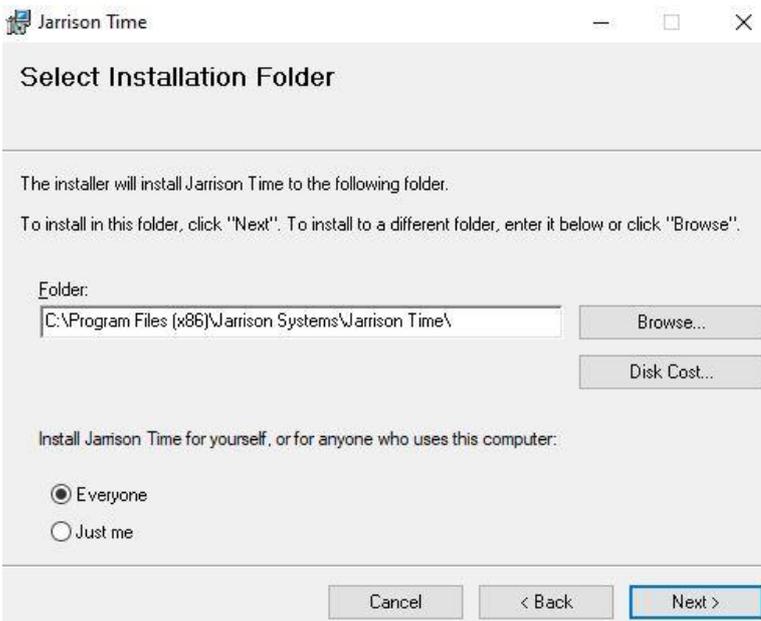
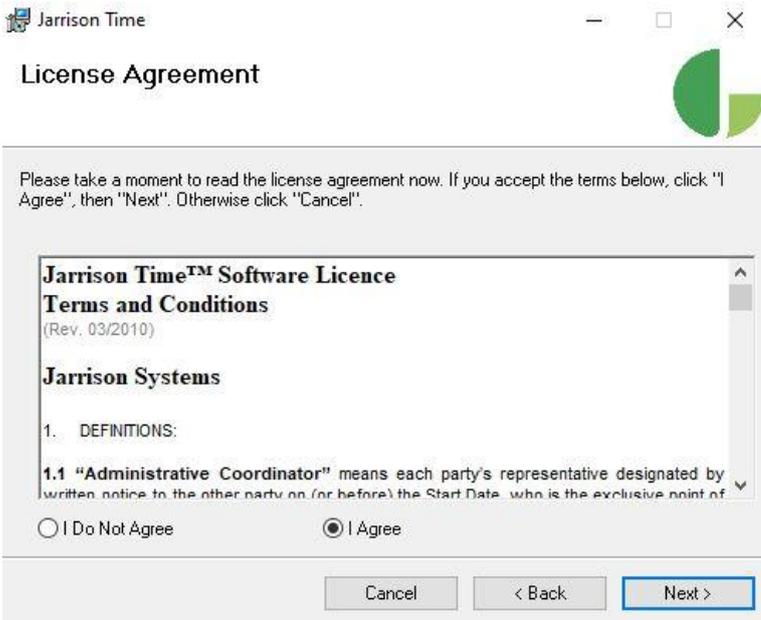
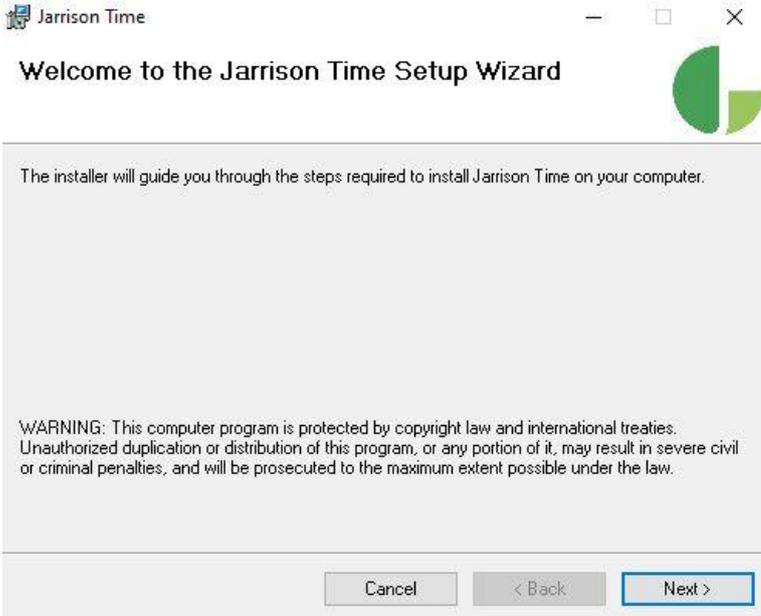
Installation Process

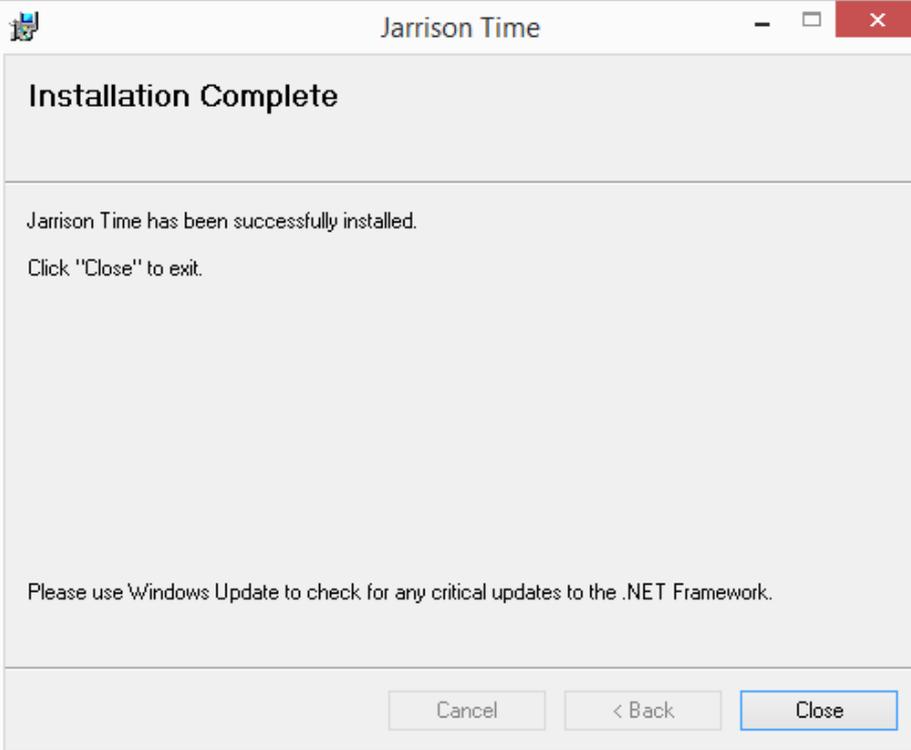
Please ensure the Microsoft Visual C++ Redistributable 2015 x64 and x86 packages have been installed.

Download the latest version of Jarrison Time from www.jarrison.net.

You can download the Connection Manager at the same time. The Connection Manager is a utility that can assist with the setup of Jarrison and SQL, though more experienced users can complete installation without the use of this program.

Run the installation files of both downloads. Below is the sequence of installation screens for Jarrison Time. Click '**Next**' and then again on each successive screen. Note that the Jarrison Time installation package should usually be the last package installed when installing with interfaces or other Jarrison components.





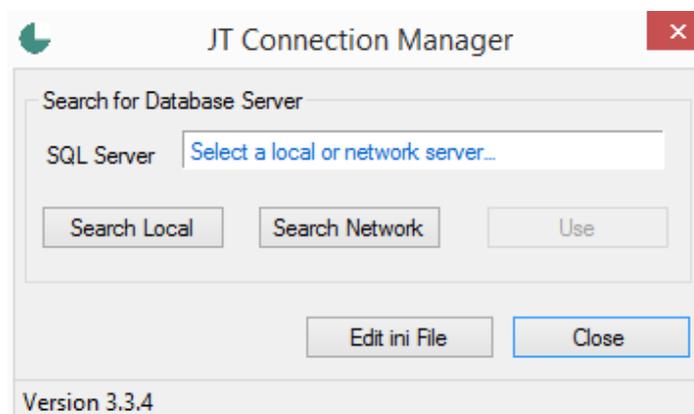
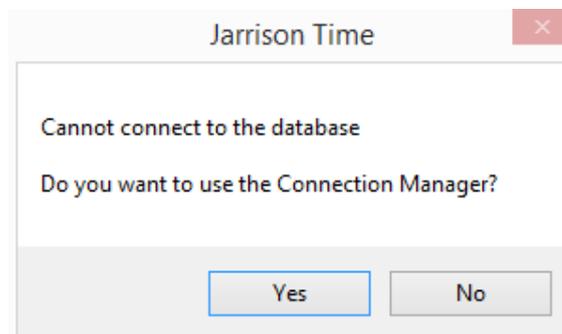
Starting Jarrison Time for the first time

After launching, JT (Jarrison Time) first looks for the 'C:\JT-Data\Config\Jarrison.ini' file, if it is not found JT will create one containing default values. This includes the SQL Server name, which by default is the computer name with the instance name 'SQLEXPRESS' appended to it and possibly the database name, which is usually 'JTime'. If the file is present and cannot connect to the database, JT will look for the 'JT Connection Manager.exe' program in the same folder as JarrisonTime.exe. If present it will run this program, which searches for all instances of SQL Server databases. If this is not present you will need to edit the jarrison.ini file manually to connect to the database.

After installation has completed, launch Jarrison Time by double clicking the application icon on the desktop, or locate the shortcut icon from the Start menu.



If prompted, opt to use the Connection Manager to connect with the SQL server. If the database connects automatically (i.e. you do not receive the below prompt to use the Connection Manager), verify that you have connected to the correct server. The bottom line displayed on the login screen shows the connected SQL server.

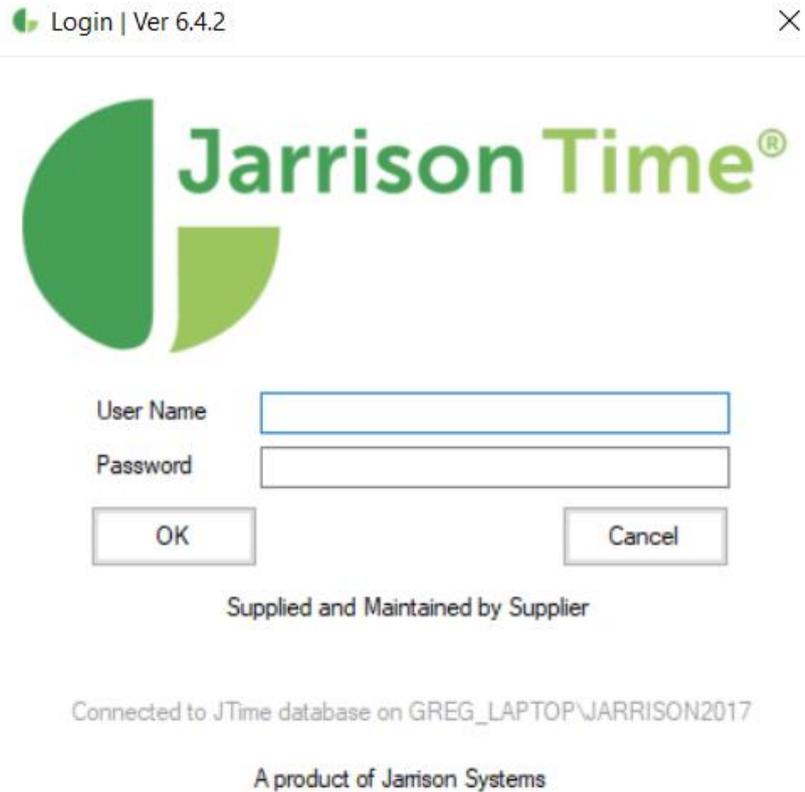


If your SQL instance is running on the local machine, use **'Search Local'**. If you're unsure simply use **'Search Network'**, this will find all available SQL servers you can connect with.

Select the correct Jarrison Time SQL server instance from the results of the search. You can click **'Use'** once the correct instance is selected.

Logging In

Upon successful connection with the SQL server a login window will be presented, as shown below. Enter your user name and password and click on **'OK'** or press Enter. Contact your supplier if you are not sure of the login details.



Login | Ver 6.4.2

Jarrison Time®

User Name

Password

OK Cancel

Supplied and Maintained by Supplier

Connected to JTime database on GREG_LAPTOP\JARRISON2017

A product of Jamison Systems

Jarrison.ini Contents

The contents of this file do not follow any specific order, JT searches for certain keywords and applies each action accordingly. Not all of the entries are required and if omitted JT will use default settings. The .ini file can be different for each user, allowing a few customizable options for individual users. Note that for most settings it is most important that the .ini file on the engine machine has all required entries. User machines may or may not require the same settings, depending on the settings involved.

Note that prior to version 6, options found under '**Configuration**', '**System**', '**Misc**' tab would be .ini entries. Settings in **Misc** tab will override any in the .ini file.

Security – This determines the type of connection to the database, options are listed below:

- **Security=NT** - Windows Authentication, no password required to gain access to the SQL instance.
- **Security=SQL** - SQL Server Authentication, which requires a username and password to the SQL instance (the default user name is 'jt' and password is 'jtime', all lowercase) this is necessary for multiple users to connect to the database.
- **Security=SQLA** - SQL Server Authentication with a configurable password. Please see the **Setting up Additional Users** section at the end of this manual for more information.

SQLUsername=jt - The SQL authentication username used by Jarrison can be customized with this line.

Server=xxx - Name of the SQL server where the database resides. If a specific port is being used for the Jarrison database, it can be specified by appending it with a comma e.g. **Server=MyMachine\SQLEXPRESS,2020**

Database=xxx - Name of the database, normally '**JTime**'.

Supplementary Database=SUPP (The default is JT_Supp)

Registration=xxx - Code created for registration portion of the licence.

Activation=xxx - Code created for activation portion of the licence.

JTSQLDataPath= xxx - This is the path to the SQL data files, which are used by **JT Support** and **JT Tools**. Example: C:\Program Files\Microsoft SQL Server\MSSQL11.SQL2012\MSSQL\DATA

Default Department=xxx - The '**Code**' for the Department you want to have as the default when adding employees.

To determine a system code click on '**Setup**', '**System Configuration**', '**General-1**' tab and then check '**Show Database codes**'. The same applies for Default Company=, Default Occupation=, Default Class=, Default Site=, Default PayGroup=, Default ClockingGroup=, Default AccessGroup= and Default Shift=.

Below are optional non-standard defaults to assign during an auto-add import process:

Default Company=1

Default Department=1

Default Occupation=1

Default PayGroup=1

Default Class=1

Default Shift=1

Default Site=1

Default ClockingGroup=1

Default AccessGroup=1

Default Grade=1

Default Calendar=1

From 6.4 the above options can be set from the '**User Groups**', **Defaults** tab.

SearchPath=C:\JT-Data\output.txt - Sets the file path and name the output file used by fingerprint search window.

Customx=Hide - If one or more custom data fields need to be hidden on particular user PCs, use this entry. x will correspond with the field being used e.g. Custom5=Hide

VisitorEnroller=True (or Omitted). This will make the '**Logon**' and '**Visitors**' screens maximized, not allowing the operator to perform other PC actions.

IO Register=True - This entry will open Jarrison straight into the **In/Out Register** instead of the regular application window. This is useful for front desk (reception) operators.

Tracelog=Yes - This file will be created each time JT Trace Engine is started, used for fault finding.

Webserver Offline=30 - Used to specify the time interval for checking online devices. default is 150 seconds. Applied value is in minutes.

Jarrison Time Registration

The installer usually assists with the registration process. If you have just installed Jarrison Time, you will need to complete the registration details in order to receive an activation code from your supplier. To do this, click on **'Continue'** from the initial screen, and then click on **'Setup'**, then **'Registration'** from the menu bar. You will need to send the details via email, or phone through the details to your supplier. Once the activation codes have been received you can enter them by clicking **'Enter New Codes'** from the initial screen or **'Activate'** from the registration screen. Any further changes made to these registration details will render the licence inactive. However if you upgrade the licence by increasing the devices, employees or users, only the user who will actually add the extra employees, users or devices will need to be relicensed with new activation codes.

If the system is not licenced or is going to expire at the end of the current month the below window will be displayed automatically. You should **'Send Information'** which will generate an email (if the PC has email setup) and attach all the necessary information ready to be sent to your supplier. If the PC has no email setup you can **'Save File'** from the registration window in the software and email that file from a PC with email, to your supplier. Once the activation codes are sent you can **'Enter New Codes'** or **'Continue'** into Jarrison Time if the licence has not yet expired.

Software Licence

This system is not licenced

This will send your current licencing information to your supplier, using your email.
(You are required to send your info in order for your supplier to activate your licence.
Activation codes will only be released once you have paid your licence invoice.)

Once you have received your activation codes from your supplier,
click here to type them in. Then continue using the software as normal.

Continue using the software until the expiry date

Software Licence

This licence will expire on 31-Oct-2018

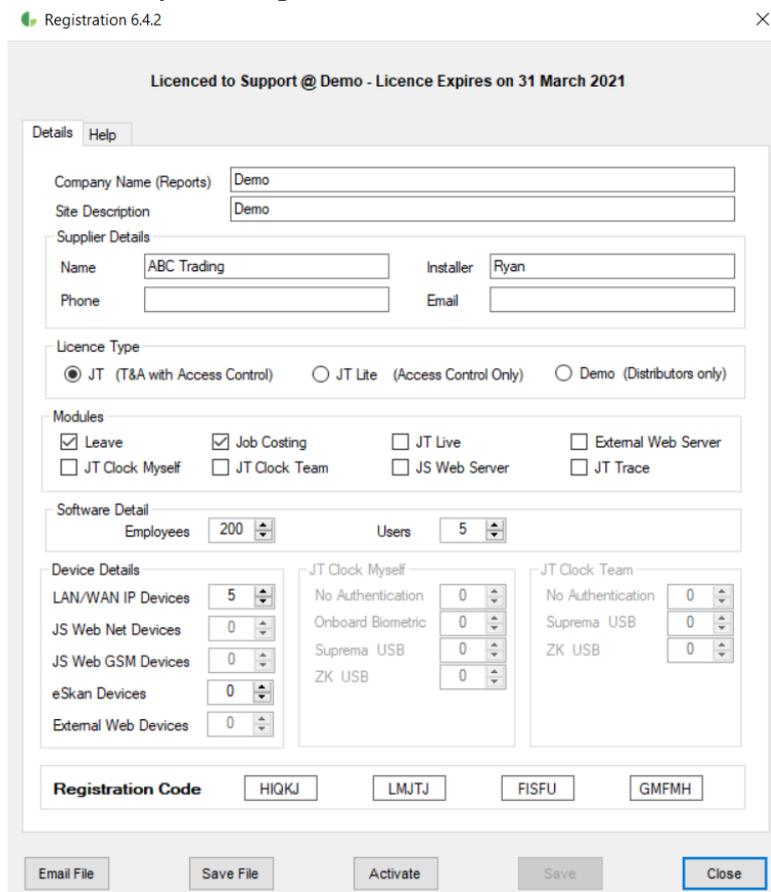
This will send your current licencing information to your supplier, using your email.
(You are required to send your info in order for your supplier to activate your licence.
Activation codes will only be released once you have paid your licence invoice.)

Once you have received your activation codes from your supplier,
click here to type them in. Then continue using the software as normal.

Continue using the software until the expiry date

Setting License Information

Click on 'Setup' then 'Registration' from the menu bar.



Modification of below details can take place at any time, per needs of the client, however most options will require relicensing.

Company Name - This is the name of the end user company, this name will appear on all reports.

Site Description - This is the description of the site. It is optional and can also be the same as the 'Company Name'.

Supplier Details

Name - This is the name of the company who is installing and maintaining the software for the site.

Installer - This is the name of the installer.

Phone - This is the phone number of the supplier and will appear on the **Login** window if this field is completed.

Email - This is the email address of the supplier and will appear on the **Login** window if this field is completed.

The supplier phone number and email address do not affect the licence and can be changed without relicensing the software.

Licence Type

JT - Jarrison Time (T&A with Access Control)

JT Lite - Access Control only

Demo - This is used for sales purposes only. It works with the JT Demo database

Modules

Leave - Include the Leave module in the licence

Job Costing - Include the Job Costing module in the licence

JT Live - Include the Advanced Access module which facilitates anti-passback and zone sequencing

External Web Server - Enable licensing of Web Devices using a third-party service provider

JT Clock Myself - Enable licensing of Clock Myself devices

JT Clock Team - Enable licensing of Clock Team devices

JS Web Server - Enable licensing of Web Devices using Jarrison Systems' service

JT Trace - Include the Trace module

Software Detail

Employees - This is the maximum number of **Active** employees allowed in the software.

Users - This is the maximum number of users (operators) allowed in the software.

Device Details

LAN/WAN IP Devices - This is the maximum number of regular Devices allowed in the software.

JS Web Net Devices - This is the maximum number of Internet-based Jarrison Systems Web Server Devices allowed in the software.

JS Web GSM Devices - This is the maximum number of GSM(SIM-card)-based Jarrison Systems Web Server Devices allowed in the software.

eSkan Devices - This is the maximum number of eSkan Devices allowed in the software.

External Web Devices - This is the maximum number of External Web Server Devices allowed in the software.

JT Clock Myself

No Authentication - This option specifies how many Clock Myself devices using no authentication method can be in the system.

Onboard Biometric - This option specifies how many Clock Myself devices using the device's own authentication means can be in the system.

Suprema BioMini2 - This option specifies how many Clock Myself devices using a Suprema Biomini2 can be in the system.

ZK SilkBio - This option specifies how many Clock Myself devices using a ZKTeco enroller can be in the system.

JT Clock Team

No Authentication - This option specifies how many Clock Team devices using no authentication method can be in the system.

Suprema BioMini2 - This option specifies how many Clock Team devices using a Suprema Biomini2 can be in the system.

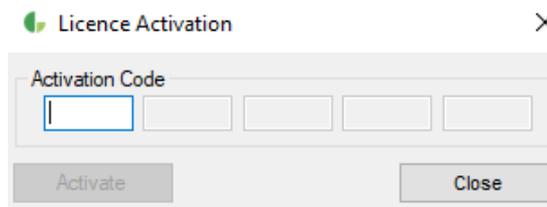
ZK SilkBio - This option specifies how many Clock Team devices using a ZKTeco enroller can be in the system.

Registration Code - The computer-specific code that will be sent to Jarrison Systems in order to register the machine.

The **Customer Code** is a unique identifier for each site.

Complete the details as necessary and then either '**Email File**', which should prepare an email to your supplier using the default email client, or you can '**Save File**' which will allow you to save the file to any location for emailing later, or from another computer. These steps are also available on '**Help**' tab.

An activation key will be emailed back to you shortly after the licence file has been sent in. To apply the new code click on '**Activate**' from the **Registration** window (shown above), or '**Enter New Codes**' from the **Software License** window that appears after logging in (shown on the previous page), or click '**Activate Licence**' under '**Action**' on the menu bar. Then paste the received code into the awaiting field.



The image shows a dialog box titled "Licence Activation" with a close button (X) in the top right corner. Below the title bar, there is a label "Activation Code" above a row of five input fields. The first field is active, with a blue border and a cursor. Below the input fields, there are two buttons: "Activate" on the left and "Close" on the right.

Setting up Additional Users on the Network

In order for multiple users to connect to the database via the network, the following changes need to be made to the server (PC) where the JT databases reside, to make communication possible. It is recommended to temporarily disable the firewall and antivirus, and then follow the steps below. Only when all communications are successful should you re-enable the firewall. If communication is still possible through the firewall, re-enable the antivirus software. This procedure will help eliminate any possible causes of connection failure to the database.

1. Including SQL Security

Open **'Microsoft SQL Server Management Studio Express'** by going to **'Start'** and then the appropriate entry **'Microsoft SQL Server'**. Note that the menu entry name and some of the below steps may differ slightly between Windows and SQL versions.

Mixed mode:

Right click on the server (right at the top left of the object explorer) and select **'Properties'**.

Select **'Security'** from the top left of this new window.

Ensure **'Server Authentication'** is set to **'SQL Server and Windows Authentication'** and click **'OK'**.

2. Update security in JT

Update information in the **'C:\JT-Data\Config\Jarrison.ini'** file, ensure that **'Security= SQL'** is set.

3. Create the JT User

In the object explorer, click the **'+'** next to **'Security'**.

Right click on **'Logins'** and select **'New login'**.

In the new window enter **'jt'** (lower case) as the **'Login name'**

Now click on the **'SQL Server Authentication'** radio button.

The password is **'jtime'** (lowercase).

Confirm the password **'jtime'**.

Deselect **'Enforce Password policy'**.

NB: Leave default database as **'master'**.

Click on **'Server Roles'** from the list on the left and select **'sysadmin'** only.

Click **'OK'**.

NB: If the **'jt'** user on the server cannot have the default password **'jtime'**, you can change the password to whatever you need it to be and then modify the entry in the **'C:\JT-Data\Config\Jarrison.ini'** file to **'Security= SQLA'**. Then when you start JT for the first time you will be prompted to enter your new SQL password for the server. If the password is incorrect it will warn you and you will have to retry. If the password is correct JT will encrypt this password into the .ini file and each time you log in JT will decrypt this password for the server and use it to gain access.

4. Enable TCP/IP

In **'SQL Server Configuration Manager'** (**'Start'**, **'Microsoft SQL Server'**, **'Configuration Tools'**)

Click the **'+'** next to **'SQL Server Network Configuration'**.

Now click on **'Protocols for SQLEXPRESS'**, this will list the protocols on the right of the window.

Double click on the TCP/IP protocol and this will open the **Properties** window. Set **Enabled** to **'Yes'**.

Now click on **'OK'**. (A connection to the database should now be possible.)

If the firewall was temporarily disabled and needs to be re-enabled, enable it and attempt to logon to JT.

If the connection cannot now be made to the database, the ports on the firewall need to be opened by following these steps below.

You will need to restart the SQL Server Services for the changes to take effect. (You can also restart the PC.)

5. Configure JT to access SQL Server through the Firewall

Open **'SQL Server Configuration Manager'**. Note the below steps may vary slightly according to the version of SQL installed.

Click the **'+'** next to **'SQL Server Network Configuration'**.

Now click on **'Protocols for SQLEXPRESS'**, this will list the protocols on the right of the window.

Double click on the TCP/IP protocol and this will open the properties window, and then click onto the **'IP Addresses'** tab.

In the **'IP All'** section, next to the **'TCP Port'** box, type **1550** and click **'OK'**. (leave **'Dynamic'** as is).

SQL Server now needs to restart which can be done from this SQL Server Configuration Manager window. Click on **'SQL Server Services'** near the top left of the window, then right click on **'SQL Server'** in the right pane of the window and select **'Restart'**.

6. Add a port for SQL Express to the Firewall

From Control Panel, click on Windows Firewall (the firewall should now be **'On'**) now click on **'Advanced Settings'** then **'Inbound Rules'**, **New Rule, Port**. Do the same for **'Outbound Rules'**.

Type in a description (SQL Express) and enter the port number **1550** (as configured for SQL above).

Select **'TCP'** and click **'OK'**.

Note that on large or corporate sites, specific ports may be set for SQL. Check with the IT administrator before changing defaults.

7. Add a port for SQL Browser to the Firewall

Click **'Add a port'** and type in a description (SQL Browser). Enter the port number **1434** (default for SQL Browser). Select **'UDP'** and click **'OK'**. Do this for Inbound and Outbound rules.