Important note regarding backwards compatibility:
This method of migration uses SQL backups to create a single file for transfer. You must pay close attention to your SQL instance versions across both SQL servers, as backups are not **backwards compatible**. For example, a backup created in SQL 2008 R2 (instance version 10.50) is not compatible with SQL 2008 R1 (instance version 10.00) or SQL 2005 (instance version 9.0).

Backups are **forwards compatible** though. For example when created on a SQL 2005 instance, you will be able to restore a backup on a SQL 2008 R1 or R2 instance.

You must check the actual instance version rather than the version of SQL Management Studio, as these are not guaranteed to be the same. SQL 2000 and SQL 2005 instances can still be managed in the 2008 version of SQL Management Studio.

You can check the instance version of each SQL server by following these steps:

1) In SQL Management Studio on the server, connect to the instance (eg. **SERVERNAME\SQLSERVER)** where your Personnel database is located.
2) Open the Object Explorer if it isn't already visible by pressing **F8** or selecting **Object Explorer** from the **View** menu. You may be asked to connect to your SQL instance again.
3) You will see at the top of the tree-view in Object Explorer the name of your SQL server and instance, followed by the instance's version number.

Backing up the SQL database on your original server:

1) In SQL Management Studio on the server, connect to the instance (eg. **SERVERNAME\SQLSERVER)** where your Personnel database is located.
2) In the Object Explorer on the left (press F8 if it isn't visible), expand the **Databases** section so that you can see the **Personnel** database.
3) Right-click the Personnel database and select **Tasks > Back Up…**
4) In the new screen, ensure that **Backup Type** is set to **Full**, and that **Backup component** is set to **Database** and there are **0 days** against the **Backup set will expire** option.
5) In the **Destination** section, select the **Back up to: Disk** option. If there are any file paths in the list below, select them and click **Remove** to clear the list.
6) Click **Add…** to open a second screen, and from here click the **'…'** button to open a third screen that displays your server's hard drives and directories.
7) Select a suitable location for the backup file, and give a filename of **PersonnelMigration.bak** – ensure that you add the **.bak** file extension to the filename as it is not automatically set.
8) Press Ok, then Ok, then Ok in the initial screen. A progress indicator will activate on the left showing you the progress of the backup. Depending on the size of your database, this may take several minutes.
9) Once the backup is finished, you can find it using Windows Explorer, right-click it and select **Send To > Compressed (zipped) Folder** to put your backup into a zip archive, which can compress the file size considerably to aid in transferring it.
10) Now the database has been backed up and compressed, we recommend you take your Personnel database offline to avoid any new accidental changes during the migration process. Ensure that everybody has closed down Simply Personnel and/or Self Service, then right-click the Personnel database in SQL Management Studio's Object Explorer and select **Tasks > Take Offline**.
11) You will now need to copy your backup across to the new SQL server.

Restoring the SQL database on your new server:

1) With your zipped database backup copied to the new server, unzip the .bak file into a temporary directory on one of your main hard-drives. SQL Management Studio will generally not see networked drives.
2) In SQL Management Studio on the server, connect to the instance (eg. **SERVERNAME\SQLSERVER)** where you wish to restore your Personnel database.
3) In the Object Explorer on the left (press F8 if it isn't visible), right-click the **Databases** section and select **Restore Database…** from the menu.
4) In the new screen, type **Personnel** in the **To database:** box, and ensure that the option against **To a point in time:** is **Most recent possible**.
5) Select the **From device:** option and press the **'…'** button to open a second screen. Press **Add** here to open a third screen that displays your server's hard drives and directories.
6) Find the folder where you have extracted your **PersonnelMigrate.bak** file into, expand it so you can see the backup, and double-click the backup.
7) You will be returned to the previous screen where there will now be a list-box containing the folder path to your backup file. Press **Ok** to return to the initial screen.
8) In the **Select backup sets to restore:** list-box you should now see one entry with a tick-box on the left. Tick this box. **(*)**
9) Click the **Options** section in the top-left of the **Restore Database** screen to change to a different set of parameters.
10) In the **Restore database as:** list-box ensure that the file paths are ok. The Restore Database function will essentially extract the two database component files into this path. If you wish to select a different path, click the **'…'** button for each file and select a new location from the folder-list screen that appears.
11) For each file you will need to manually specify the filename and extension. The **Rows Data** file should be called **Personnel.mdf** and the **Log** should be called **Personnel_log.ldf** – although it is not essential that these are correct, it is recommended.
12) When you are happy with this, press **Ok**. A progress indicator will activate on the left showing you the progress of the restore. Depending on the size of your database, this may take several minutes.

(*) – If you see more than one entry here then you have backed your database up into an existing backup file with the **Append to the existing backup set** option. Technically the last entry in the list is the restore point you need to use, but it is also best to scroll the list to the right and check the dates and times against each restore point to be 100% sure you are selecting the correct one.

Ensuring the new SQL server is configured correctly:

New SQL instances generally install with their default connection protocols switched off. This is to minimise the potential for unauthorised access as it forces you to manually open only the protocols you need. What this means is that even if the ODBC connections at the client end are re-pointed to the new server, the server itself may not be configured to accept the connection yet. These protocols can be switched in the SQL Configuration Manager:

1) On the new SQL Server, open **SQL Configuration Manager**, select **SQL Server Services** in the left-hand list and ensure that **SQL Server Browser** is **Running**. If not, right-click it and select **Properties**, change the **Start Mode** to **Automatic** in the **Services** tab, press Ok, then right-click again and select **Start**.
2) Again in SQL Configuration Manager, expand the **SQL Server Network Configuration** option in the left-hand list and select the option for your server instance (eg. **SQLEXPRESS**). Ensure

that **TCP/IP** is **Enabled**, and if not right-click it and select **Enable**. Then return to SQL Server Services, right-click the service for your server instance and select **Restart**.

3) Ensure that on the server, the Windows Firewall allows an exception for port number **1433** (the default SQL port), or try temporarily disabling the Windows Firewall and testing the ODBC connection at the client side again. On Windows Server 2008 you can switch off the Firewall for Domain connections only which is known to allow an ODBC across the domain but will not compromise your server's security to the outside world.

Modifying the ODBC settings for Simply Personnel on a 32bit Operating System:

1) On each client PC where Simply Personnel is installed, go to **Control Panel**, then **Administrative Tools**.
2) Open **Data Sources (ODBC).**
3) A screen will open with several tabs along the top. Pick the tab labelled **System DSN**.
4) You will see a list of connections. Two of them will be called **Personnel** and **PersonnelDemo**.
5) Double-click the **Personnel** connection to open its properties.
6) In the very first screen you will see the existing server connection – this will be pointing to your original SQL server and instance name (eg. **OLDSERVER\SQLEXPRESS**).
7) You should be able to see the new SQL server and instance name in the drop-down box, however if not, simply over-type the full server name and instance into the **Server** box (eg. **NEWSERVER\SQLEXPRESS**).
8) All other settings should be ok as they are, so you should be able to carry on clicking **Next** until the end of the ODBC setup process. **(*)**

(*) If you are using SQL Authentication rather than the default Windows Authentication, you will need to reapply your SQL User's password in the second screen of the ODBC configuration.

Modifying the ODBC settings for Simply Personnel on a 64bit Operating System:

1) On the client PC, go to Windows Explorer / My Computer, then Navigate to the following folder: **C:\Windows\SysWOW64**
2) Inside here, search for and open the following file: **odbcad32.exe**
3) Follow the same instructions from Step 3 as above.

Modifying the web.config for Self Service:

1) On the web server where Self Service is installed, open the **web.config** in Notepad – by default this will be located in **C:\Inetpub\wwwroot\SimplyWebPersonnel** however you may have installed Self Service to a different location.
2) Scroll to the very bottom of the file and look for a line that reads:

   ```
   <add key="Website_ConnectionString"
   value="server=OLDSERVER\SQLEXPRESS;database=Personnel;Integrated Security=SSPI;"/>
   ```

   Or:

   ```
   <add key="Website_ConnectionString"
   value="server=OLDSERVER\SQLEXPRESS;database=Personnel;User id=Personnel;pwd="/>
   ```

3) There will be 2 lines here that look very similar – you **do not** need to modify the one that starts with the **<!--** and ends with the **-->** symbols as this line is not in use.

4) Simply over-type the name of your old SQL server name and instance with the name of your new SQL server name and instance, so that it reads as follows:

   <add key="Website_ConnectionString"
   value="server=NEWSERVER\SQLEXPRESS;database=Personnel;Integrated Security=SSPI;"/>

   Or:

   <add key="Website_ConnectionString"
   value="server=NEWSERVER\SQLEXPRESS;database=Personnel;User id=Personnel;pwd="/>

5) Save the web.config and try logging into Self Service. The effect should be immediate.