Install/Server Migration Checklist

School Name: _____   **Date:** _____

Server Name: _____   **IP Address:** _____

To migrate to a new server, you will need to do each of the following steps.

Installing the following may take some time but you can migrate with as little as

5 minutes down time if required for live systems.

1. Copy the existing IDAttend folder from the apps folder on old server to your new server

2. Install MSSQL server
    For primary schools under 500 students and high schools under 300 students we recommend MSSQL express edition 2016
     https://www.microsoft.com/en-us/download/details.aspx?id=56840

    For high schools and larger primary schools please obtain a copy of mssql 2016 enterprise edition from service centre or your regional office. Obtain the setup files, so you can install.

3. Install MSSQL management studio 16 or higher (version 17 link below)
    https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-2017

4. Install/setup IDWeb on new server
    If you don't currently have an apps/IDAttend/IDWeb folder download from
    http://IDAttend.com.au/idaw and extract into apps/idattend/idweb

5. Install/setup Email queue
    If you don't currently have a apps/IDAttend/email folder download from
    http://IDAttend.com.au/support.html
    Extract the contents into apps/IDAttend/email

    (The above steps can be done without shutting down IDAttend if you need to migrate a live system)

6. Copy the database files from old server to new server
7. Attach the database files to the new server
8. Edit the IDAttend/system/IDAttend.ini file to reflect your new server details
    Check IDAttend , IDWeb and email is back up and running

9. Extra steps for schools wishing to speed up the migration process when migrating on a school day
10. Backup Backup Backup
11. Trouble shooting

1. *Copying IDAttend from old server to new.*

Copy the entire contents of your data/apps/IDAttend folder from your old server to new server.

NOTE: If IDAttend is "live" do NOT copy the /data/apps/database folder.

Instead after the copying all other files/folders, create /data/Apps/IDAttend/database folder to be used later

Make sure the permissions on the new IDAttend folder are the same as previous install.

If you used zero touch to create the IDAttend folder be sure to add the IDAttend Change group to be a member of the GG usr staff group.

If you manually created the IDAttend folder be sure to add the gg usr staff group to the IDAttend folder with modify rights ticked

Within the IDAttend folder the "photos" and "IDWeb" folder should also have IUSR account added.

The iusr account is so IIS / IDWeb can access the folders it needs

Note: this is the IUSR account NOT "iusr server name" account (just iusr)

Right click on the IDWeb folder and choose properties
On the Security tab, click edit, click add
Type IUSR and click check names, click ok and click apply, click ok click ok

Right click on the Photos folder and choose properties
On the Security tab, click edit, click add
Type IUSR and click check names, click ok and click apply, click ok click ok

Install MSSQL server (Note during the install the installer may disappear or nothing may be appearing to happen. This is usual and you just have to be patient

- Start the installer (setup.exe from the *inst*all package)
- Choose Installation
- Click New SQL Standalone Installation
- On MICROSOFT Update screen click next (bypassing updates)
- Click next on every screen
- Tick to Except the license terms
- Click next on product key
- Only Tick -- Database Engine Services (that's the only one needed)
- Click Next
- Change Named Instance to→IDAttend
  (Ensure you are NOT using the Default Instance)
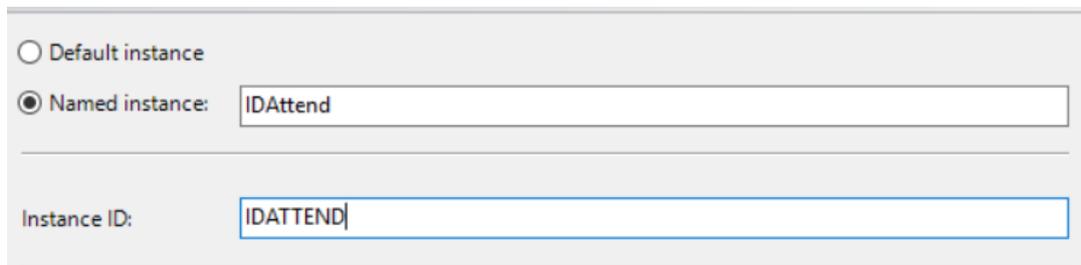
- Click Next
- Set Startup Type to Automatic

- Click Next

- On the Server Configuration Screen Choose Windows authentication
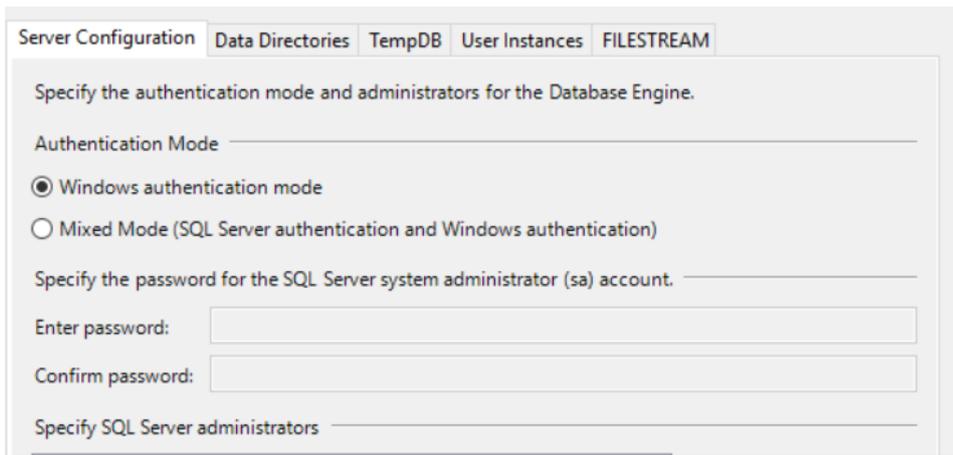
- At bottom of screen Add current user
- If you are not the local OC for the school we advise you add the gg orange card group for the school to allow others to maintain the mssql install in the future
- DO NOT CLICK next
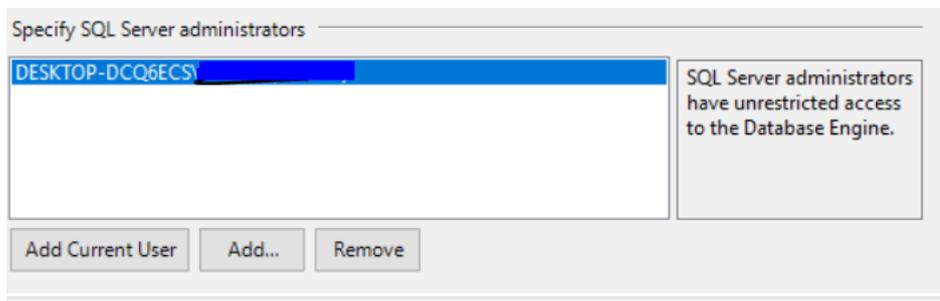
- At top Click the Data Directories TAB
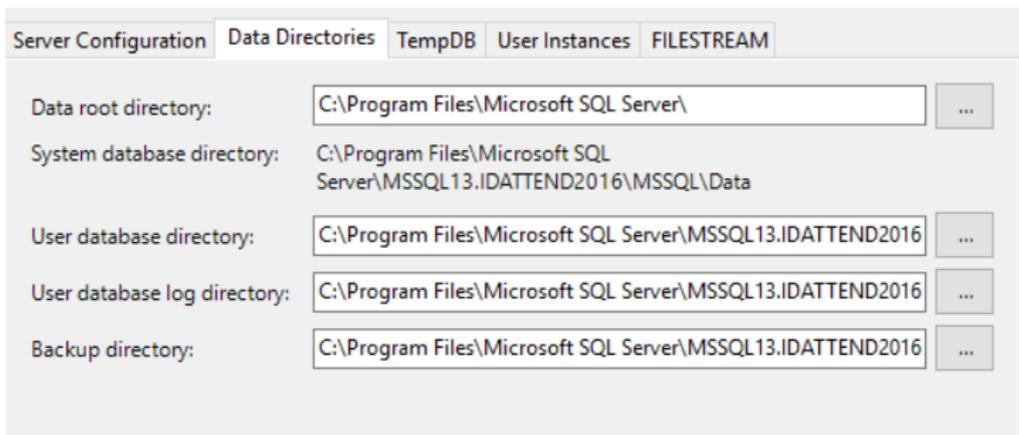
- Change
- **USER DATABSE DIRECTORY** to **d:/xxxx_DATA/Applications/IDAttend/database**
  - And
- **BACKUP DIRECTORY** to **d:/xxxx_DATA/Applications/IDAttend/DBBackup**

- Click Next
- The Install will now occur
- Finish Install & Close

3.   *Install MSSQL Management Studio (2016 or higher)*

Double click the installer, click Install, there are no options it just installs
During the install there may be a point where the installer sits in same percentage for an extended period.
This is normal as the installer is silently installing a Microsoft package before continuing
Once setup is complete click close

3a.

- Go to SQL Server 2016 folder (click start button) Select SQL Server 2016 Configuration Manager
- Open SQL Server Network Configuration
- Double click Protocols for IDAttend
- Enable both TCP/IP and Names Pipes
- Close Configuration Manager
- The above step are required for workstations to access the MSSQL server

3b.

- Click start menu and type services and start the services app (from administrative tools)

- In the list of services right click on "SQL server (IDAttend)" and choose properties
- Click on the "Log On" tab
- Click on local system account, (as per below screen shot) click apply
- On general tab stop and start the service , click ok to close the window
- The above allows management studio to access idattend/database directory for attaching files

- In the list of services right click on SQL browser
- Set start-up type to automatic,
- Click on the "Log On" tab
- Click on local system account, (as per below screen shot) click apply
- Click on general tab and start the service , click ok to exit the window
- The above allows workstations to access the database server from idattend
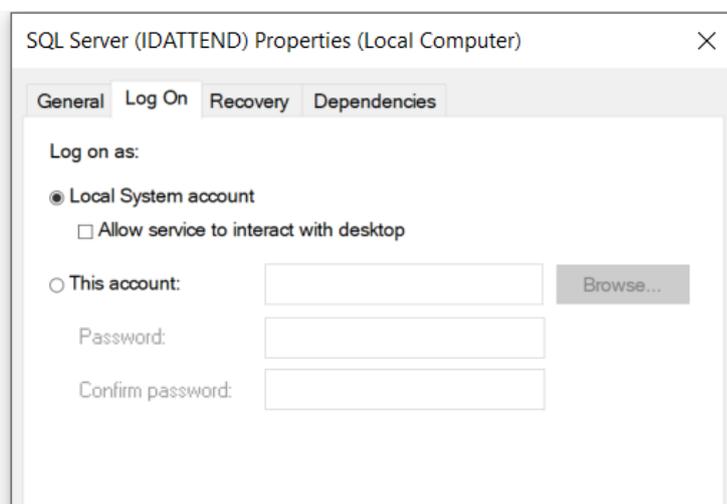
- Go to Start menu/ Microsoft SQL Server Tools/Server Management Studio
- Click Connect
- Check the server name is Server name \ IDAttend
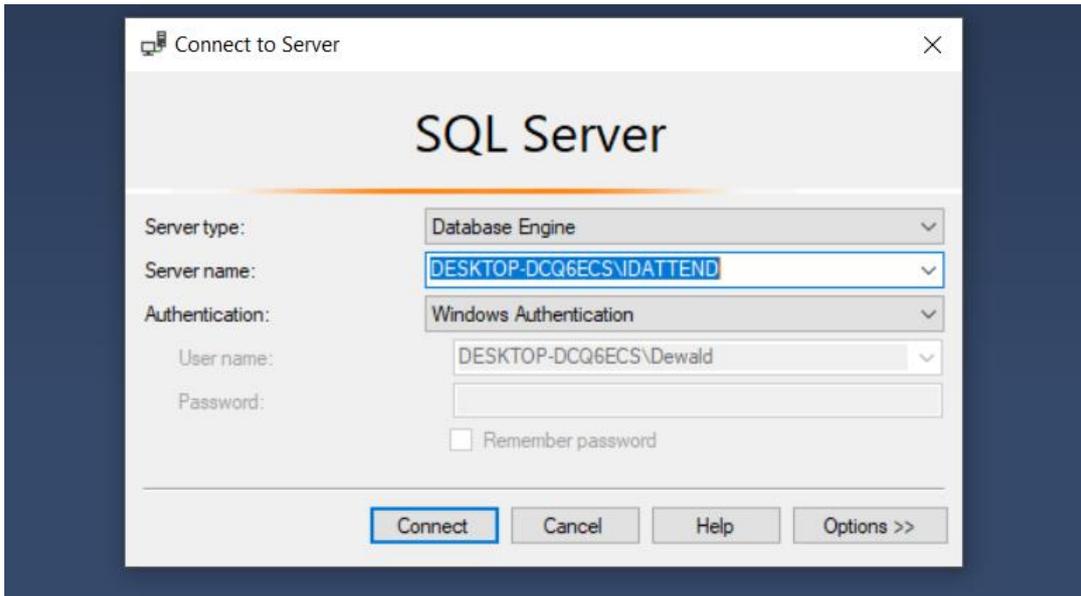
- Once connected go to left hand tree menu
- Right click on server name and choose Register, then click save
- Right click server name and choose properties
- In left column choose "processors" and tick boost SQL Server priority and click ok
- You can leave leave SQL management open as it will be required again in a minute

4.   *Install IDWeb*

There should already be an IDWeb within the apps/IDAttend folder structure.
If there is no IDWeb folder download the following install and extract into an
IDWeb folder within the IDAttend folder.
http://IDAttend.com.au/idaw

Check that .Net 4 and ASP.net 4 are installed

- Open Server Manager. (This is the 2016 server manager which usually has icon on desktop)
  Click Add roles and features.
  Click Installation type. Click Role-based or feature-based installation and then click Next.
  On the Server Selection dialog box, click Select a server from the server pool. In the Server Pool list, select
  your server and then click Next.
  On the Server Roles dialog box select, Web Server (IIS) and expand
  Click on web server and expand
  Click on Application development and expand
  Tick   .NET Extensibility 4.6   and ASP.NET 4.6
  If you are prompted to add additional features, click Add Features.
  Leave all other default role services selected.
  On the Confirmation dialog box, click Install.   Close when finished

- Open IIS (Internet Information Services)   (Click start menu and type IIS)
- Open tree view on left, right click application pools and "Add Application Pool…"
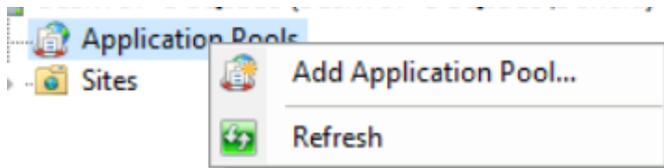
- Name new app pool **IDWebAppPool and** set to .net version 4
  Click ok to close the window

With the new IDWebAppPool still highlighted Click Advanced settings (on far right) and change identity to **localsystem** and set Idle-Timeout minutes to 1500
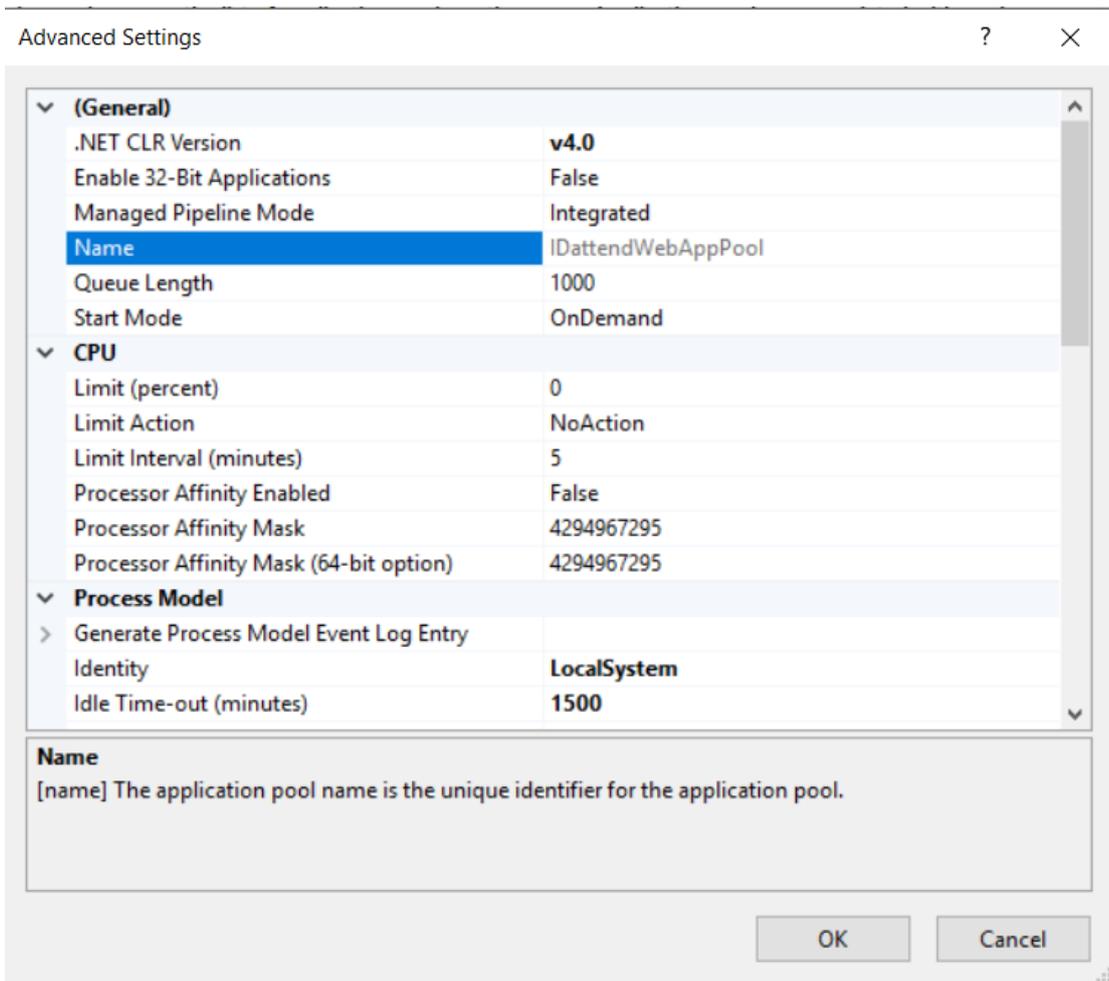
- In Left hand column expand Sites/Default website

- **Right click on default website and choose add application**
  Name IDWeb, Select IDWebAppPool and change physical path to
  d:/xxxx_data/apps/IDAttend/IDWeb

- **Right click on default website and choose add application**
  Name IDAttendWebPhotos, Select IDWebAppPool and change physical path
  d:/xxxx_data/apps/IDAttend/photos

- **Right click on default website and choose add application**
  Name StaffWebPhotos, Select IDWebAppPool and change physical path to
  d:/xxxx_data/apps/IDAttend/photos

- **Right click on default website and choose add application**
  Name VisitorWebPhotos, Select IDWebAppPool and change physical path to
  d:/xxxx_data/apps/IDAttend/visitor

- Go to d:/xxxx_data/apps/IDAttend/IDWeb folder and edit web.config file as needed.
  (If new Install All "xxxx" should be replaced with correct details)
  Note the new AD Server on 2016 server has changed from 001 to 020.

- The following lines will need to be edited. New server name can be the name or the ip address of the server
  <add name="IDAttendDB"   (this line needs to be changed to the new server address)
  <add key="StudentPhotosPath" value="http://newserver/IDAttendWebPhotos/" />
  <add key="VisitorPhotosPath" value="http://newserver /VisitorWebPhotos/" />
  <add key="StaffPhotosPath" value="http://newserver /StaffWebPhotos/" />

  <add key="ADSERVER" (this line needs to be changed to your new 020 AD server instead of 001)

- The registration number should not need changing but can be found in your IDAttend.ini file in the System folder of IDAttend if needed.

- In IIS highlight IDWeb on left, then on far right click browse (IDWeb should appear)
- The address will be http://localhost/IDWeb/default.aspx

- Test from a workstation
- The address will be http://servername-or-ip-address/Idweb/default.aspx
- Create the link for IDWeb on the team site (One Portal) or SharePoint

- To Setup IDWeb Visitor on an iPad you can get the Visitor Manual in the IDWeb folder.

- **Please Note you will need to network the receipt printer and install the full driver on the same server as IDAttend/IDWeb for the printer to work with IDWeb Visitor.**

5. *Install Email Queue (Greatly increases speed of email in IDAttend)*

Go to apps/IDAttend/email (if you don't have this folder download as per first page if this doc

A. Open a Cmd prompt (Admin level) window
B. Make the Email folder the current folder that cmd is looking at
C. Run Register.bat – this will register the service with Windows

D. Next, right click and run as administrator the SmtpQConfigure.exe
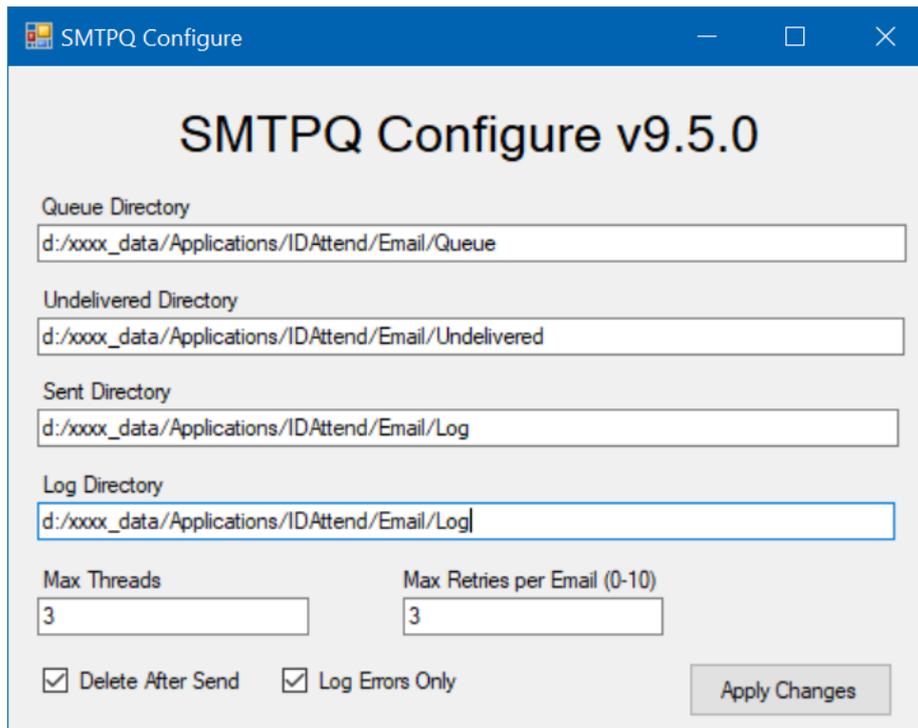
This screen is where you tell the SMTQ Service where the Queue, Log and Undelivered folders actually are. These paths are local server paths, not network paths.

You can set the sent folder to the log directory as you will be deleting sent email ti save disk space on server. These emails are logged within IDAttend.

NOTE: You must change the max threads to 3 and the Max retries to 3

Tick the two bottom options.

 Click the Apply Changes button.

E. Next right click and run as administrator the SmtpQSvcMgr64.exe

Click Install service then click start service

It should read "SMTQ Service Installed and Configured for Auto-Start"

F. **This next step will have to be done after IDAttend is setup from within IDAttend.**

In IDAttend go to tools/sms email/email setup screen

The Outgoing mail server is smtp.office365.com and Sender Email Address must be blank.
Use IDAttend Users Email Address must be ticked
Use SMTP TLS must be ticked.
Outgoing Mail Server Requires Authentication must be ticked.
Users Email Address As User Name To Authenticate must be ticked.
User Name/Password must be blank.
Outgoing Mail Server Port must be 587.

There is the option of using an email 'alias' as the sender address if sending absence emails to parents and also if Admin staff (not teachers) are sending broadcast emails from IDAttend. While these can still be used with Office 365, by default Office 365 will not allow a user to send an email using credentials that are not theirs. This can be allowed in 365 if Send As Permission is set up. This process is not within the scope of this document and the process is defined in the Office 365 documentation.

If this is not done and you send absence or broadcast messages with a specified alternative from address then the emails will fail. An alternative option we have introduced is to tick the Use Above Addresses For 'Reply To' Only. This means the email is sent with the user as the sender but if someone replies to the email it will come back to the alternate email address, instead of the sender email address.

The Maximum Number of Recipients Per Email Sent is for Broadcast Emails that are not personalised and is the number of BCC recipients that are placed on each email. The default is 200 maximum that can be specified is 450.

G.   tick the Queue Outgoing Email To The Server option
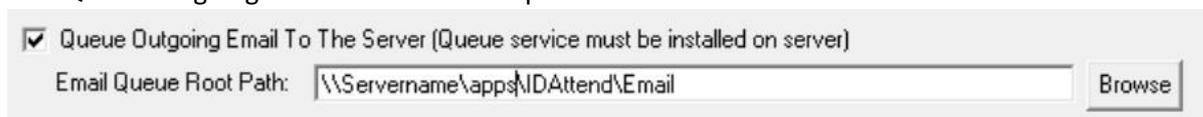
Enter or browse to the server where the Email Service root folder is. UNC path is best as all users may not have the same mapped drive structure.

H. Save the email settings.

6.   *Copy Database files*

Copy the database files from your old server to the new server apps/IDAttend/database folder.

They will be located either in your IDAttend/database folder or possibly on your c drive.

If IDAttend is still running login and go to tools/database locations.

The location of your database files will be written in blue.

If you cannot access the previous install of IDAttend you may need to search for "IDAttend" database files

The files will be named IDAttendxxxx.mdf and IDAttendxxxx.ldf where xxxx is the years that your school has been using IDAttend.

All users should be out of IDAttend. To force shutdown on all workstations, go to Tools/Force shutdown of IDAttend. In 2 minutes IDAttend will close. We suggest at this time you stop
The SQL service so no one can add new data to the database.

To stop the mssql go to services, look for sql and there should be an instance called (IDAttend)   Stop that service, disable it as you should not need to ever start it again.

Copy the files from old location to your new IDAttend/database folder

Attach databases

- Go back into SQL management studio
- In left hand column Right click on databases and choose "attach"
- Click add
- Select each of your database files for each year you been using IDAttend adding each one.
  - These files should be in your IDAttend/database folder.
  - Note if you can't add these files be sure you did the steps above especially (3b)
- Click ok and they should show under databases in the left menu.
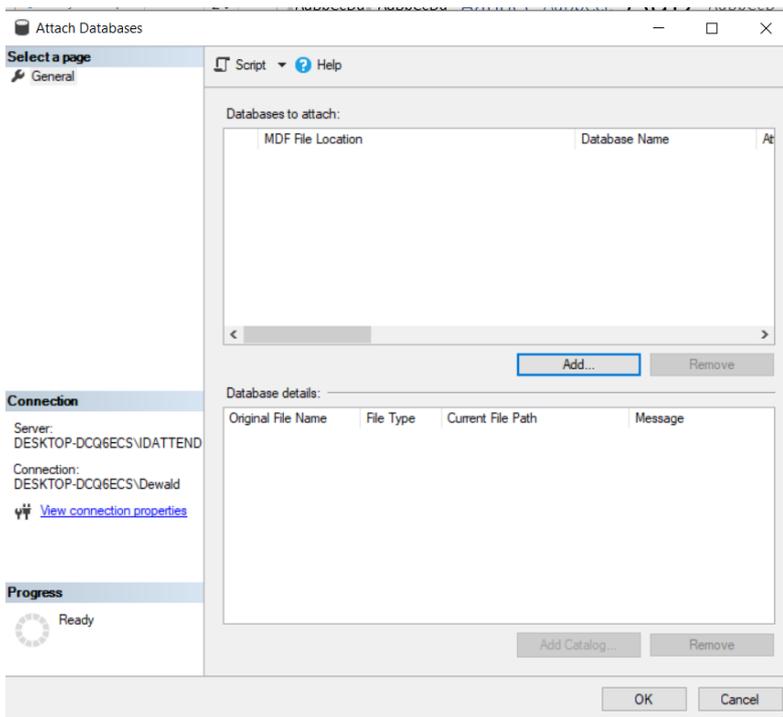
- Expand "Security" →expand logins/ Right click logins→choose new login→search
- Click Object type→Tick Groups   click ok
- Click Locations→choose entire Directory click ok

- Click check names, type → xxxxgg_usrstaff where xxxx is school number
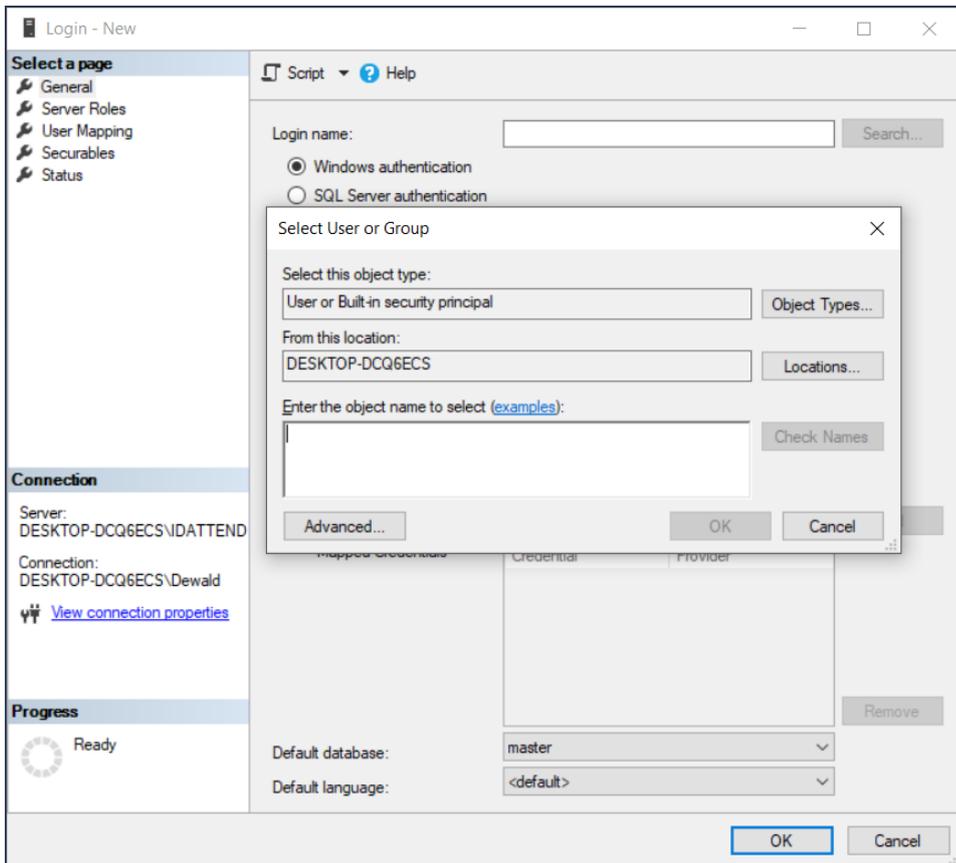
- Click ok
- **In left column click Server Rolls → tick DB creator & Sys Admin**
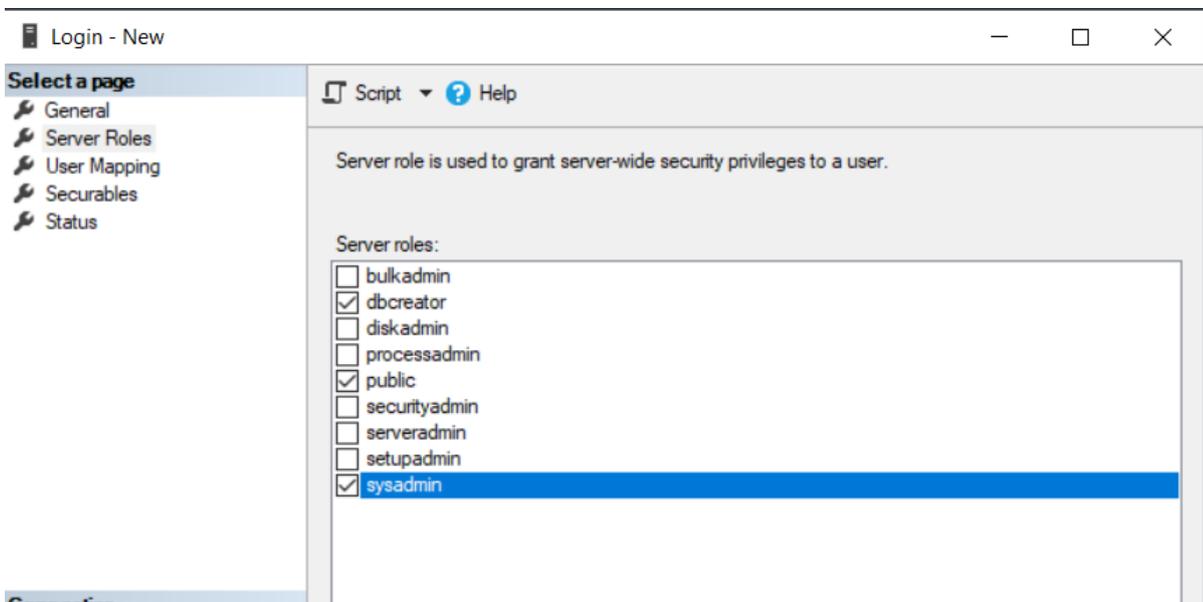
- **In left column choose User Mapping → tick Master →tick datareader/writer/owner**
- **Tick IDAttend2019 →tick db datareader/writer/owner**
- **Repeat for each IDAttend year shown/attached to the database server**
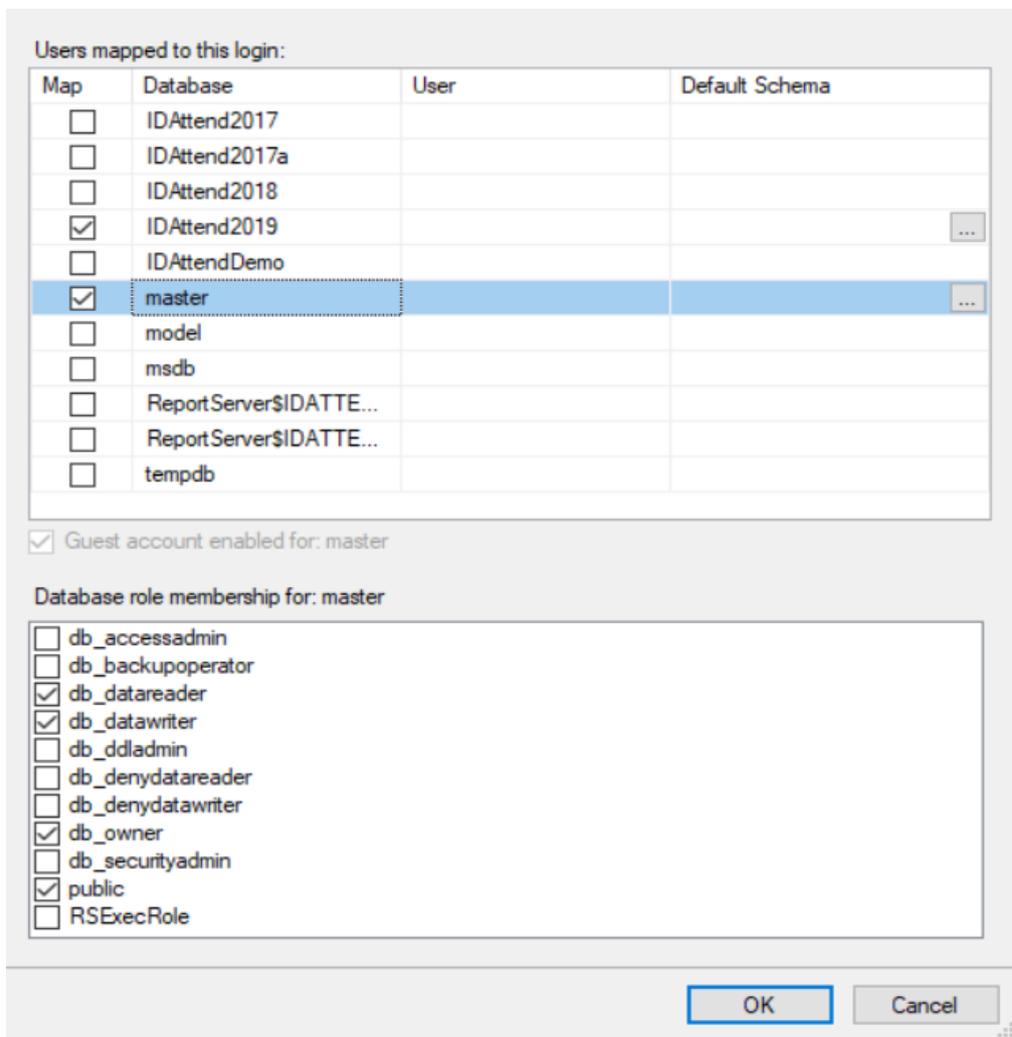
Click ok to close the login screen

Back in left column under security/logins
right click on the following logins doing the same process as above

- **Right click Network Authority System and choose properties**
- Under Server Rolls → Tick DB creator & Sys Admin
- User Mapping → Tick Master → Tick DB Data reader/writer/owner
-                     Tick IDAttend2019→ Tick DB Data reader/writer/owner
-                      Repeat for each year of IDAttend
- Click ok to close

- **Do the same with Service IDAttend login**
- Under Server Rolls → Tick DB creator & Sys Admin
- User Mapping → Tick Master → Tick DB Data reader/writer/owner
-                     Tick IDAttend2019→ Tick DB Data reader/writer/owner
-                      Repeat for each year of IDAttend

8.   *Editing your settings for the new server*

Locate the IDAttend.ini file in the IDAttend folder. (IDAttend/System)
Open in Notepad. Edit the server path to the new server name
Usually you can just change the server number in the address

Edit the photo path and other paths to new server location. Ideally these should be the full unc path to the location on the new server and save the file.

Edit the shortcut on a workstation to point to the new server location
Usually you can just change the server number in the "target" and "start in" sectios of the shortcut

Have a staff member start IDAttend and login from a workstation to check the new install
Have them check class rolls and that photos appear
On the email broadcast screen put in a subject, a message and enter an email address into the "test email" box to send a test email.
Go to admin/import/students and check the import address is correct
Go to admin/import/timetable and check the import address is correct
Go to admin/export/attendance and check the export address is correct

A call to our support can verify the above if needed

Have a staff member login to IDWeb from a workstation
Have them check class rolls and that photos appear

Roll out new shortcut to all staff for IDAttend and new link for IDWeb

The IDWeb link may need changing on the schools portal page

9.   *Extra steps to migrate a live system on a school day*

This section helps schools who are moving IDAttend from a live server to a new server during school hours and wish to have the shortest down time.

From your new server copy the newly edited apps/IDAttend/system/IDAttend.ini file into
The same location on your old server. By doing this the old shortcut to IDAttend will work till such time as you roll out a new shortcut to staff. They will be starting IDAttend from the old server but the IDAttend.ini will be pointing to the new server database. You can then later remove the old IDAttend folder on the old server once everyone has the new shortcut.

In IIS open the sites/default website section, click on IDWeb (or older install will be idaw)
From the icons in centre of screen choose http redirect
Enter the new http://servername/IDWeb/default.aspx address so anyone using an old book mark will be redirected to the new address again allowing time to advise staff of new address.

10.   *BACKUP BACKUP BACKUP*

Please ensure You are backing up the server IDAttend is installed on or at least backup the IDAttend folder.
We can't stress enough how important backup is. Please check and check again it is backing up.
If setup as above all files required for recovery will be within the IDAttend folder structure.

11.   *Trouble Shooting*

Most common issues are when the steps above aren't followed or are skipped.

If IDAttend can't start check permissions
If IDattend starts but can't find database check permissions and check IDAttend.ini was edited correctly.

If IDWeb has 400.19 or other number errors check idweb folder has correct permissions (iusr)
Or the asp 4 or .net 4 have not been installed

If IDWeb login page shows but logging in either blinks page or fails with auth error check web.config
Check the ad server is set correct in web.config
NOTE: There is a IDattend/idweb/logs directory that may contain information on the failure

If sending email fails, check the settings in IDAttend tools/sms email/email setup
Untick the email queue setting and test to see if the queue needs a restart or reconfig

Note we are not usually available during school holidays via phone but maybe contacted via email
shaun@idattend.com.au   dewald@idattend.com.au
0409 546 048   0427 206 928