aramar

Our guide on how to:

Migrate Planning Analytics from On-Premise to the Cloud

Many businesses are now making a move to the Cloud as part of a wider strategy to improve IT efficiency and control costs. IBM have made huge improvements to their Cloud offerings, making them the preferred choice for many companies and changing from an on-premise installation to a cloud SaaS installation.

Planning Analytics has traditionally been implemented on-premise, but IBM has worked hard to make migrating to the Cloud an attractive option. Companies that decide to migrate will reap the benefits in the long run, but they do need to consider the commitment and time needed to migrate a Planning Analytics on-premise installation to the Cloud. The migration process can seem daunting but does not have to be complicated or lengthy.

For the most part, a Planning Analytics migration is a copy and paste exercise. However, without excellent knowledge of Planning Analytics environments and software, both on premise and Cloud, you can experience problems. A successful migration requires you to anticipate challenges and milestones, and map these on a timeline to help structure the migration and define project success.

Our job as consultants is to make the journey to Cloud is as smooth as possible. Based on our experience, here is our guide on how you should approach migrating Planning Analytics on-premise to Cloud.

Important Recommendations

- Perspectives users will need to start using the new Excel add-in, Planning Analytics for Excel. In PA on Cloud, Perspectives is only accessible to modelers via an RDP connection and only for Excel reports that sit in IBM's cloud server. In comparison, Planning Analytics for Excel can be installed on your local computer. The new add-in has a like for like experience to Perspectives and works with reports that were initially created in Perspectives. No report re-writing required.
- Administrators who model in Architect will still be able to access that software via an RDP. But it is recommended that you start to model in Planning Analytics Workspace (web-based) as it is accessible from your local computer. The modelling in Planning Analytics Workspace is user-friendly and is a like-for-like experience with Architect.
- During testing, be aware that Perspectives will not work when Planning Analytics for Excel add-in is active, more specifically, the 'slice' function of Perspectives will hang. Whilst testing, ensure that only one add-in is active at any one time. This will also help avoid confusion on what environment the Excel report is pointing to.
- If you have a development environment in the cloud, decide what will be migrated to this environment. Options could be either a copy of your live environment or a copy of the databases in your on-premise development environment.
- Before setting up new users, familiarise yourself with what licences you have bought and ensure that you stick within that licence count.
- After the migration is complete, make sure the original on-premise databases are not accessible after the go live cut off point. You can ensure this by switching off the services to the TM1/PA database or revoking user access by removing users from groups.

Pre-Requisites

- Ensure that you have received the Welcome Pack from IBM. Pass this to your IT and get them to whitelist the URLs.
- Check with IT that you can receive emails from 'communications@mail-prod.admin.ibmcloud.com' and 'ibmacct@iam.ibm.com'. These are sent to users as part of the set-up process.
- Make sure you have Administrator access on both your on-premise and Cloud installations. The administrator of cloud should invite new users who are part of the initial migration process using the instructions from the Welcome Pack.
- Ensure that the account administrator adds the relevant users to your IBM support account, to allow them to raise tickets on behalf of your organisation.
- Ask IBM Support to create a new PA database with the same name as your existing on premise database.
- If your IT policy prefers SFTP rather than the default FTP, this change can be requested via IBM support.
- Consider using third party software for easier access the FTP/SFTP and RDPs. We recommend Filezilla for FTP/SFTP and nRemoteNG for RDP. You may need to ask IT to approve this software to be installed.
- Download the latest Planning Analytics for Excel software from Planning Analytics Workspace in the administration pane and get this right version installed on your computer (either 32-bit or 64-bit depending on your version of Excel. For the optimal experience, ensure you have a 64-bit version of Excel installed.
- Set up the relevant connections with Planning Analytics for Excel to your cloud environments.

Step 1: Copy On-Premise Database

1. Data Folder

1.1. To copy your on-premise database, log into each database and run your SaveDataAll process to commit all data from memory to disk. Navigate to the data folder and compress it as a '.zip' file.

1.2. You don't need to copy the log files unless you feel it necessary to keep a record of old log entries.

1.3. You don't need to copy the config file unless there are custom settings in there you want to replicate in cloud and need it for reference. It is best practice to use the new config file which comes with the new database as all the parameters are optimised for the new version.

1.4. It is a good practice to give a date and time stamp to the compressed file.

2. Data Source Upload files

2.1. Locate any text files that are referenced in TI processes. Copy or zip up the files ready for transferring to the cloud.

3. Planning Analytics Workspace Content (if relevant)

3.1. If you are also migrating Planning Analytics Workspace content from an on-premise environment, then navigate to Planning Analytics Administration and export the content via Lifecycle Management. This will download a gz file.

Step 2: Migration

4. Pre-Migration

4.1. Copy the compressed files from your on-premise server into the IBM cloud server. In the IBM server, the database related content should live in the file location \\data\s\prod\[PA Database Name]. It is recommended that you create a subfolder called 'Migration' and copy the migrated files into that.

4.2. Take a backup copy of initial data folder that IBM provided during the set up of the new database i.e. \\data\s\prod\[PA Database Name]\Data. It is recommended that you create a subfolder as follows: \\data\s\prod\[PA Database Name]\Backup, and copy the backup file into there.

5.   Database Migration

5.1.   Open Planning Analytics Workspace, and navigate to the administration pane, and stop the services for the Planning Analytics server you are migrating the database into.

5.2.   Access the Planning Analytics on Cloud server through the Remote Desktop Connection (RDP) provided in the welcome pack and navigate to the file share directory: \\data\s\prod\[PA Database Name]\Migration. Extract migrated compressed data folder.

5.3.   Rename the current data folder (\\data\s\prod\[PA Database Name]\Data) to 'Data.OLD' (which you can later decommission). Copy and paste the migrated uncompressed data folder in its place. Ensure it has the same name (i.e. 'Data'). Remove any existing tm1s.cfg file which might exist in the migrated data folder to avoid confusion.

5.4.   Restart the Planning Analytics server. This might take a long time depending on the start-up time of your database.

5.5.   When the server is restarted, login into Architect (via the RDP) using your IBM ID. You won't be able to view the model yet, as your IBM ID won't have the correct access privileges.

5.6.   To grant access, open the tm1s.cfg located in \\data\s\prod\[PA Database Name]. Change the security mode to 1. Restart the database.

5.7.   Open Architect, and within the username box enter 'admin' and use the password which you normally use from your on-premise database.

5.8.   Open the Clients/Groups security pane and assign your IBM ID 'admin' access.

5.9.   Within the tm1s.cfg file, change the security mode to 5 then restart the database again. and access your model using your IBM ID. You should have full access now.

5.10.   Make sure all the components are present within the model.

5.11.   If everything is working, take a backup copy of the data folder so that this position can be restored to after some initial testing, if required. Copy into the backups folder.

6.   Application Migration

6.1.   Copy the data source text files which are used in process into a new subfolder called 'Data Sources'. This subfolder will be located in \\data\s\prod\[PA Database Name].

6.2.   To ensure your Processes are working, remap the file path in your processes to the Data Sources folder in the Planning Analytics on Cloud file share data folder.

6.3.   Open all Processes that use a text file as data source. On the 'Data Source Name' field click browse and navigate to your file in the file share directory.

6.4.   Copy and paste the directory address from 'data source name' field to 'data source name on server' field, then replace all the directories prior to '\Data Sources' with '..'.

The paths would be as follows:

Data Source Name:
- \\data\s\prod\[PA Database]\Data\Data Sources\[Text File Name].[File Extension]
  If the Preview box displays data then this path is correct, no changes required.

Data Source Name on Server:
- ..\Data Sources\[Text File Name].[File Extension]

7.   Planning Analytics Workspace Migration

7.1.   If you need to migrate Planning Analytics Workspace content, then navigate to the Administration pane of Planning Analytics Workspace, then Lifecycle Management.

7.2.   Click on 'Manage Snapshots' and then 'Import'. Follow the wizard to import the gz file that you copied

into the 'Migration' folder.

7.3. It will import into your personal folders. Click on the ellipsis on the folder and then 'move' and navigate to the shared folder to move it within there.

Step 3: Testing

8. Database Testing

8.1. Open your cube views and ensure the Planning Analytics on Cloud data reflects the data within your on-premise database.

8.2. Upload data source files into IBM's file share. Run Processes to test if they works. If running the processes changes the data within the cubes, producing undesirable results, then you can restore the database back to the copy you took after the database was successfully migrated once your testing is complete.

8.3. Arrange for an interim migration of upgraded content (updated cube data, updated dimensions, new processes, etc) from your on-premise environment during the testing period, if it helps.

9. Application Testing

9.1. Disable your Perspectives add-in on your local computer and ensure that your Planning Analytics for Excel add-in is active and that you are logged in.

9.2. Open your Perspectives reports from your local computer in Planning Analytics for Excel add-in.

9.3. Check that the report contains the numbers your expecting and that the report functionality is like-for-like.

10. Security set up

10.1. Go to Planning Analytics Workspace > Users tab. Invite a small selection of users (possibly a test account) as a starting point. Set those with a user licence as either 'Consumer' or 'Analyst' role. Set up those with a modeler licence as either 'Modeler' or 'Administrator' role.

10.2. Add the users into the PA database via Architect and replicate the access of different users in your environment by placing them in the different groups. Repeat your testing to ensure that it works as expected for different access levels.

10.3. You may need to create new native groups if your current groups are not native. If this is the case, you will have to replicate access from the old groups into the new groups across all security settings (e.g. cube security, process security, element security etc).

10.4. Set up all other users nearer to go live. You can set up users in bulk via an upload file or create them one by one.

10.5. Add the users into the database via Architect and assign them into the relevant groups.

Step 4: Go Live

11. Plan for Go Live Date

11.1. Once testing confirms that your data is correct, and the application works as expected then familiarise yourself with the new tools by attending relevant training and practicing using them.

11.2. Once you're confident that you can use the new tools to complete your month-end activities and day-to-day operations then you can start to plan for your go live date.

11.3. Arrange with IT to install the software to all users before the go live date. Communicate to your users what to expect (accepting the invitation, new software install, decommissioning old tools, training etc).

12. Go Live Migration

12.1.   Arrange for one last migration of updated content on your go live date. The migration will involve selecting specific content from a refresh copy of the data folder from your on-premise environment. For example, you will copy over updated cubes, dimensions, views, subsets and any newly created content since the last migration. But you will not copy over objects which were changed during the migration on purpose such as processes (which have an updated file path) and security (which has new users and groups).

12.2.   After the final migration is complete, conduct one more round of testing to check that it has been migrated correctly.

12.3.   Communicate sign off to the project team and to your user base.

12.4.   Switch off access to the old on-premise database by either stopping the services or removing users from the groups.

You have now have successfully migrated Planning Analytics to the Cloud.

Please note that this guide applies to a general migration. Aramar can provide a more tailored approach if your set up is more complex.