***Sample Power BI Report***

***Design Document Fragment***

***Deployment***

|  |  |
| --- | --- |
| *Date:* | *2025-04-29* |
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# Introduction

*… see sample fragment 01 …*

# Scope of Work

*… see sample fragment 01 …*

# Workflow

*… see sample fragment 02 …*

# Issues

*… see sample fragment 02 …*

# Business Rules

*… see sample fragment 02 …*

# Data

*… see sample fragment 03 …*

# Reports

*… see sample fragment 04 …*

# Validation

*… see sample fragment 05 …*

# Deployment

*Describe the parameters, deployment method, and deployment procedure (including those who will be performing [i.e., responsible for] each step).*

## Parameters

*The Power BI files are configured with parameters for data sources (e.g., file: folder name, file name; database: server name, database name; etc.), the same Power BI file is deployed to each environment, and the parameters in each environment are modified as desired in the Power BI Service.*

*Assign an ID and (short) name to each parameter used along with notes for each environment.*

*The following example uses three environments (development, testing, and production [or DEV, TEST, and PROD]) and SharePoint (SP) as data access locations.*

| ***ID*** | ***Name*** | ***DEV*** | ***TEST*** | ***PROD*** |
| --- | --- | --- | --- | --- |
| *P-1* | *Invoices SP Folder name* | *Invoicing\_DEV* | *Invoicing\_TEST* | *Invoicing* |
| *P-2* | *Invoices SP File name* | *Invoices.xlsx* | *Invoices.xlsx* | *Invoices.xlsx* |
| *P-3* | *Customers SP Folder name* | *Customers\_DEV* | *Customers\_TEST* | *Customers* |
| *P-4* | *Customers SP File name* | *Customers.xlsx* | *Customers.xlsx* | *Customers.xlsx* |

## Manual Deployment

*Power BI artifacts (PBIX files) are published to the Power BI Service using Power BI Desktop.*

*Describe the manual deployment steps and who is responsible for each step. An example of a 3-tier deployment is:*

| ***ID*** | ***Name*** | ***Responsibility*** |
| --- | --- | --- |
| *MD-1* | *Create the DEV artifacts in Power BI Desktop using the DEV data sources and credentials* | *Developers* |
| *MD-2* | *Create the DEV, TEST, and PROD workspaces* | *Power BI Administrators* |
| *MD-3* | *Publish the artifacts to the DEV workspace* | *Developers* |
| *MD-4* | *Publish the artifacts to the TEST workspace* | *Power BI Administrators* |
| *MD-5* | *Manually set data sources and credentials in the TEST workspace* | *Power BI Administrators* |
| *MD-6* | *Manually set parameters in the TEST workspace* | *Power BI Administrators* |
| *MD-7* | *Manually refresh data in the TEST workspace* | *Power BI Administrators* |
| *MD-8* | *Complete validation in the TEST workspace* | *Testers/Business Users* |
| *MD-9* | *Publish the artifacts to the PROD workspace* | *Power BI Administrators* |
| *MD-10* | *Manually set data sources and credentials in the PROD workspace* | *Power BI Administrators* |
| *MD-11* | *Manually set parameters in the PROD workspace* | *Power BI Administrators* |
| *MD-12* | *Manually refresh data in the PROD workspace* | *Power BI Administrators* |
| *MD-13* | *Manually set the data refresh frequency in the PROD workspace* | *Power BI Administrators* |
| *MD-14* | *Ensure the correct ownership of the semantic models in the PROD workspace* | *Power BI Administrators* |
| *MD-15* | *Ensure the correct workspace access to protect the PROD assets* | *Power BI Administrators* |

## Deployment Pipelines

*Power BI artifacts (PBIX files) are published to the DEV workspace in the Power BI Service using Power BI Desktop. Deployment to downstream environments is accomplished by a deployment pipeline.*

*Describe the deployment pipeline steps and who is responsible for each step. An example of a 3-tier deployment is:*

| ***ID*** | ***Name*** | ***Responsibility*** |
| --- | --- | --- |
| *DP-1* | *Create the DEV artifacts in Power BI Desktop using the DEV data sources and credentials* | *Developers* |
| *DP-2* | *Create the DEV, TEST, and PROD workspaces* | *Power BI Administrators* |
| *DP-3* | *Publish the artifacts to the DEV workspace using Power BI Desktop* | *Developers* |
| *DP-4* | *Create the pipeline with the DEV, TEST, and PROD stages* | *Power BI Administrators* |
| *DP-5* | *Assign the DEV, TEST, and PROD workspaces to stages* | *Power BI Administrators* |
| *DP-6* | *Select artifacts in the DEV stage and deploy to the TEST stage* | *Power BI Administrators* |
| *DP-7* | *Set rules (parameters) in the TEST stage* | *Power BI Administrators* |
| *DP-8* | *Set data sources and credentials in the TEST workspace* | *Testers/Business Users* |
| *DP-9* | *Manually refresh data in the TEST workspace* | *Power BI Administrators* |
| *DP-10* | *Complete validation in the TEST environment* | *Power BI Administrators* |
| *DP-11* | *Select artifacts in the TEST stage and deploy to the PROD stage* | *Power BI Administrators* |
| *DP-12* | *Set rules (parameters) in the PROD stage* | *Power BI Administrators* |
| *DP-13* | *Set data sources and credentials in the PROD workspace* | *Power BI Administrators* |
| *DP-14* | *Manually refresh data in the PROD workspace* | *Power BI Administrators* |
| *DP-13* | *Manually set the data refresh frequency in the PROD workspace* | *Power BI Administrators* |
| *DP-14* | *Ensure the correct ownership of the semantic models in the PROD workspace* | *Power BI Administrators* |
| *DP-15* | *Ensure the correct workspace access to protect the PROD assets* | *Power BI Administrators* |

## Procedure

*The deployment procedure will be updated after each deployment so that any necessary adjustments (lessons learned) are captured, and future deployments will be smoother and easier.*

*Assign a sequential ID and (short) name to each step in the deployment procedure along with any required notes, the specific final value, and date the step was completed (and by whom).*

*NOTE: The deployment pipeline method is used in the following example.*

| ***ID*** | ***Name*** | ***Notes*** | ***Value*** | ***Completion & Signoff*** |
| --- | --- | --- | --- | --- |
| *S-1* | *Environment* | *The target environment* | *PROD* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-2* | *Publish Target Data* | *Target data has been published to the access location* | *SharePoint Folder:*  *\Corporate\Invoicing*  *File names: various* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-3* | *Publish Power BI file* | *Source PBIX has been published to the source Power BI Workspace* | *AR01 - All Invoices* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-4* | *Set Rule/Parameter (Invoices SP Folder name)* | *(as many lines as necessary for 1 per rule/parameter; only 1 shown here for illustrative purposes)* | *Invoicing* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-5* | *Select Artifacts in Source* | *All that will be deployed in this iteration* | *Report:*  *AR01 - All Invoices*  *Semantic Model:*  *AR01 - All Invoices* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-6* | *Deploy* | *From the source environment to the target environment* | *TEST to PROD* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-7* | *Verify Artifacts in Target* | *In Power BI Service*  *All that should have been deployed in this iteration* | *n/a* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-8* | *Verify Data Source Credentials on target* | *In Power BI Service* | *n/a* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-9* | *Verify Security on target* | *In Power BI Service*  *Credentials/access on workspace and/or report and/or app* | *n/a* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-10* | *Verify Parameter (Invoices SP Folder name)* | *(as many lines as necessary for 1 per rule/parameter; only 1 shown here for illustrative purposes)* | *Invoicing* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-11* | *Verify Data Refresh* | *In Power BI Service*  *Manually refresh the data to confirm access* | *n/a* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-12* | *Set Data Refresh Schedule* | *In Power BI Service* | *Daily at 2:00 AM UTC* | *Date: 2025-03-29*  *By: Greg Philps* |
| *S-13* | *Verify Deployment* | *In Power BI Service*  *Conduct smoke testing to confirm the basic operation of the report(s)* | *n/a* | *Date: 2025-03-29*  *By: Greg Philps* |

*-- end of fragment*