

What Are Paginated Reports in Power BI?

If you need to print a perfect, structured reports (like invoices, bank statements, or regulatory filings), Paginated Reports in Power BI are your go-to solution!

Unlike standard Power BI reports (which are interactive and visual), Paginated Reports are fixed-layout, multi-page documents designed for pixel-perfect exports (PDF, Excel, Word).

Paginated reports have extension RDL called report definition language

Why Use Paginated Reports?

- ✓ Structured & Printable – Ideal for invoices, financial statements, or compliance reports.
- ✓ Handles Large Data Volumes – Perfect for detailed, row-level data exports.
- ✓ Consistent Formatting – Looks the same in print or PDF as it does on-screen.

Struggling to choose between Paginated Reports and regular Power BI Reports? Here's a simple breakdown:

◆ Paginated Reports

- ✓ Fixed, pixel-perfect layout (great for printing/PDFs)
- ✓ Multi-page structure (like traditional SSRS reports)
- ✓ Best for: Invoices, financial statements, regulatory filings
- ✓ Handles large datasets (row-level detail exports)
- ✓ Built in Power BI Report Builder

◆ Power BI Reports (Standard Dashboards)

- ✓ Dynamic, interactive visuals (drag-and-drop flexibility)
- ✓ Single canvas, scrollable (not paginated)
- ✓ Best for: Exploratory analytics, real-time dashboards
- ✓ Highly interactive (slicers, drill-downs, tooltips)
- ✓ Built in Power BI Desktop

💡 Key Takeaway:

Use Paginated Reports when you need print-ready, structured documents.

Use Power BI Reports for interactive, visual data exploration.

Both have their strengths—pick the right tool for the job!

✓ What You Can Do for Free:

1. Download and Use Power BI Report Builder

- Yes, **Power BI Report Builder** (used to create paginated reports) is **completely free to download and use**.
- You can design and build .rdl paginated report files locally.

📄 Download link: [Power BI Report Builder](#)

2. Export Reports to PDF/Excel

- You can export your paginated reports to PDF, Excel, Word, etc., for **free** from Report Builder.

✗ What You Need a Paid License For:

1. Publish to Power BI Service (Cloud)

- To **publish paginated reports to Power BI Service**, you need:
 - A **Power BI Premium license (per user or per capacity)**.
 - Or access to a **workspace in a Premium capacity**.

2. Share Reports Online

- **Sharing paginated reports online (in browser or app)** also requires Premium.

✓ Workaround (Free) Options:

- **Create and run locally** using Power BI Report Builder.
- **Export to static formats** (PDF, Excel) and share manually.
- Use **SQL Server Reporting Services (SSRS)** if you have it set up on-premises.

Summary:

Action	Free	Requires Premium
Design in Power BI Report Builder	✓	✗
Export to PDF/Excel locally	✓	✗
Publish to Power BI Service	✗	✓
Share online (interactive)	✗	✓

*** If I have to download Report Builder to create paginated reports, then what is the purpose of the 'Paginated Report' visual in Power BI Desktop?

❑ What is the "Paginated Report" Visual in Power BI?

The **Paginated Report visual** is a special visual **used to embed a pre-published paginated report** inside a Power BI report (**in Power BI Service, not Desktop**).

📌 Important Points:

Feature	Description
Usage	It allows you to view a paginated report (.rdl) <i>inside</i> a regular Power BI report.
Source	It works only if the paginated report is already published to Power BI Service (in a workspace with Premium capacity).
Configuration	You configure the visual by pointing it to a published paginated report and can pass parameters from the Power BI report to the embedded one.
Power BI Desktop Limitation	In Power BI Desktop , this visual won't work fully — you will just see a placeholder or error until it's published.
License Required	You need Power BI Premium (Per User or Per Capacity) to use this visual live in the Power BI Service .





How It Fits in the Workflow:

1. You **create a paginated report (.rdl)** using **Power BI Report Builder**.
2. You **publish it** to a **Premium workspace** in the Power BI Service.
3. In **Power BI Desktop**, you add the **Paginated Report visual** and configure it to point to that published .rdl file.
4. When published, users can view **interactive paginated content** inside a regular Power BI dashboard.

So why is it shown in Power BI Desktop if it's not fully usable there?

Because you can **set it up** in Desktop (like configuring the link, parameters, layout), but it will **only function properly after publishing** to a Premium-backed workspace in Power BI Service.

Summary:

Scenario	Do You Need Report Builder?	Do You Need Premium?
Create paginated report (.rdl)	 Yes	 No
Use paginated report visual in Power BI	 Yes (to create the .rdl)	 Yes (to view in Power BI Service)

what is the usage of paginated visual in power bi if we need to publish first in service?

Primary Usage: Seamless Integration Between Paginated + Interactive Reports

Power BI users sometimes need:

- **Pixel-perfect reports** (e.g., invoices, financial statements) from **paginated reports**
- **Interactive dashboards** from **regular Power BI visuals**

The **Paginated Report visual** lets you combine both in **one single report page**, making the experience smoother.

How It Works — End-to-End Workflow

Step Action

- 1 You design a paginated report using **Power BI Report Builder**
 - 2 You **publish it to a Premium workspace** in the **Power BI Service**
 - 3 In **Power BI Desktop**, you add a **Paginated Report visual**
 - 4 You configure the visual with the **URL or reference** of the published .rdl report
 - 5 You **publish the Power BI report** (with this visual) to the same or another workspace
- ☒ Now users can see **both paginated + interactive visuals** together — e.g., click a slicer and see a PDF-like report update below
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Why It's Useful (Real-World Scenarios):

Use Case	Why Paginated Visual Helps
Download-ready reports	Users can download clean PDFs directly from the visual
Printable output	Format-sensitive outputs (e.g., invoices, balance sheets) shown in proper layout
Parameter passing	You can pass filters from slicers/cards to the paginated visual
One-stop reporting	Business users get everything in one report , no switching tools or tabs

So Why It's in Desktop?

It's mainly for **design-time binding and configuration**. Even though the content won't render in Power BI Desktop (you'll see a placeholder or message), it allows developers to:

- Set up the visual
- Bind it to a published report

- Test parameter connections
- Publish it as a complete solution

✔ Summary:

Question	Answer
Do you need to publish the .rdl first?	✔ Yes
Can you preview the visual in Desktop?	✗ No (placeholder only)
Why use the visual then?	To integrate paginated content into interactive dashboards in Power BI Service for a seamless experience

Difference between paginated report and power bi report

🔍 Power BI Reports vs. Paginated Reports — Full Comparison

Feature	Power BI Reports (.pbix)	Paginated Reports (.rdl)
Tool Used to Create	Power BI Desktop	Power BI Report Builder
File Extension	.pbix	.rdl
Layout Type	Interactive, responsive layout (good for web/dashboards)	Pixel-perfect, page-based layout (good for printing/PDFs)
Best For	Dashboards, data exploration, self-service BI	Invoices, statements, print-ready reports
Data Interactivity	Highly interactive (filters, slicers, drillthrough)	Limited interactivity; mainly static or parameter-driven
Data Loading	Import, DirectQuery, Live Connection	Query-based (fetches data at runtime using SQL or DAX)

Feature	Power BI Reports (.pbix)	Paginated Reports (.rdl)
Export Options	PDF, Excel, PowerPoint (with limited formatting)	High-quality export to PDF, Word, Excel (perfect formatting)
Printing Support	Limited, not always pixel-perfect	Excellent, print-friendly design with page breaks
Query Language	DAX, Power Query (M)	SQL (for relational DBs) or DAX (for Power BI datasets)
Use in Power BI Service	Works with Power BI Pro license	Requires Power BI Premium (PPU or capacity)
Report Format Flexibility	Adaptive to screen/device sizes	Fixed layout (you control exact sizes, headers, footers, margins)
Parameters	Filter panes and slicers (interactive)	Built-in parameters (used at runtime to filter data)
Performance	Can cache data with import mode	Fetches data live when report is run


****Gateway required? ****

Do You Need a Gateway for Paginated Reports?

Yes, you need a gateway if...

You are connecting to an **on-premises data source**, such as:


- SQL Server (on-prem)
- Oracle DB (on-prem)
- Teradata (on-prem)
- Excel/CSV files stored on a local network/server

 In this case, you must install and configure an **On-premises Data Gateway** so the Power BI Service can access your data source.

No, you don't need a gateway if...

You're using a **cloud-based data source**, such as:

- Power BI Dataset (published to Power BI Service)
- Azure SQL Database
- Azure Synapse Analytics
- SharePoint Online
- Web APIs / OData feeds (cloud-hosted)

 In this case, the data source is already accessible from the cloud, so no gateway is needed.

How to Know If You Need a Gateway?

When you try to **publish or run** the paginated report in Power BI Service:

- If the dataset uses an on-prem source, Power BI will prompt you to **configure a gateway connection**.
- If it's cloud-based, the report will run without needing one.

****Interview Questions on Paginated Reports****

Basic-Level Questions & Answers

1. What are Paginated Reports and how are they different from regular Power BI reports?

Answer:

Paginated Reports are pixel-perfect, print-friendly reports best suited for documents like invoices, financial statements, and forms. Unlike interactive Power BI reports, paginated reports are designed to fit neatly on pages, with precise control over layout, page breaks, headers, and footers.

2. Which tool is used to create paginated reports?

Answer:

Paginated Reports are created using **Power BI Report Builder**, a standalone desktop application provided by Microsoft.

3. What is the file extension of a paginated report?

Answer:

Paginated reports use the .rdl (Report Definition Language) file extension.

4. Can you create paginated reports for free? If yes, how?

Answer:

Yes, you can create paginated reports for free using **Power BI Report Builder**, which is free to download. You can also export reports to PDF or Excel locally without a license. However, publishing to Power BI Service requires a Premium license.

5. Which license is required to publish a paginated report to Power BI Service?

Answer:

To publish paginated reports to Power BI Service, you need a **Power BI Premium Per User (PPU)** license or access to a **Premium capacity workspace**.

6. What types of data sources are supported in Paginated Reports?

Answer:

Paginated reports support many sources like SQL Server, Power BI datasets, Azure SQL, Oracle, SharePoint lists, SSAS (Analysis Services), and more.

7. What is the purpose of the 'Paginated Report' visual in Power BI Desktop?

Answer:

The 'Paginated Report' visual lets you **embed a paginated report (.rdl)** inside a Power BI report. It's used for combining pixel-perfect reports with interactive dashboards. It works only when the .rdl is **already published** to Power BI Service (Premium required).

□ Intermediate-Level Questions & Answers

8. How do you connect a paginated report to a Power BI dataset?

Answer:

After publishing your .pbix to Power BI Service, use Report Builder to **connect to a Power BI dataset** via the "Power BI dataset" data source option. Sign in with your Power BI account and choose the dataset. You'll use **DAX** to query the data.

9. How are parameters used in paginated reports?

Answer:

Parameters allow users to filter or customize the report at runtime. You can create parameters manually or derive them from datasets and link them to filters, queries, or visibility conditions.

10. Can you pass slicer values from a Power BI report to a paginated report? How?

Answer:

Yes, using the Paginated Report visual, you can pass slicer values as **URL parameters** to the embedded paginated report. The visual can be configured to accept filter values dynamically.

11. How do you handle pagination (page breaks) in Report Builder?

Answer:

You can define **page breaks** in tablix groups, between report items, or after specific rows. There are also settings in the report body and tablix properties to control page size, margins, and breaks.

12. What export formats are supported for paginated reports?

Answer:

Paginated reports can be exported to **PDF, Excel, Word, XML, CSV, PowerPoint, and MHTML** formats with high-quality formatting.

13. How do you design headers and footers in paginated reports?

Answer:

You can add a **report header and footer** in Report Builder by right-clicking the report canvas. These sections can include static or dynamic content like titles, dates, page numbers, or images.

14. How is the layout of paginated reports different from Power BI reports?

Answer:

Paginated reports use a **fixed layout** designed for printing, with exact control over size and position. Power BI reports use a **responsive, interactive layout** that adapts to screen sizes.

15. Can you explain the difference between “shared dataset” and “embedded dataset” in Report Builder?

Answer:

- **Shared dataset:** Defined once and reused in multiple reports; easier to manage and maintain centrally.
 - **Embedded dataset:** Created and stored inside a single report; specific to that report.
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Advanced-Level Questions & Answers

16. How can you implement dynamic row-level filtering using parameters in paginated reports?

Answer:

Create a parameter (e.g., @Region) and reference it in your dataset query using a WHERE clause (e.g., WHERE Region = @Region). This filters the report based on user input dynamically.

17. What is the best way to print or export multiple invoices in a single paginated report?

Answer:

Group the data by customer or invoice number and insert a **page break between each group**. This creates one invoice per page, ideal for exporting or printing in batch.

18. How do you optimize performance when working with large datasets in paginated reports?

Answer:

- Use **parameterized queries** to reduce data volume

- Use **stored procedures** or **views** for complex logic
 - Avoid loading all data at once — filter at the source
 - Use **subreports** carefully to avoid performance hits
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19. What are the limitations of paginated reports in Power BI Service compared to SSRS?

Answer:

- No support for data-driven subscriptions (yet)
 - Fewer customization options in schedule and delivery
 - Requires Premium license
 - Cannot host on-prem; SSRS supports on-prem deployment
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20. How can you use expressions in Report Builder to format text, visibility, or conditional logic?

Answer:

You can write expressions using **VB.NET syntax** (e.g., =IIF(Fields!Sales.Value > 1000, "Green", "Red")) to dynamically control styles, visibility, labels, formatting, etc.

21. How do you secure paginated reports shared in Power BI Service?

Answer:

Use **Power BI workspace permissions**, embed them in **apps**, and control access through **row-level security (RLS)** on underlying datasets (if Power BI Dataset is used). Also, only users with Premium access can view the reports.

22. What challenges have you faced when integrating paginated reports with Power BI dashboards?

Answer:

- Cannot preview paginated visuals in Desktop — only in Service
- Must ensure parameters are correctly mapped

- Licensing restrictions (Premium required)
- Performance issues if datasets are large and filters are missing