pb powerbunch



SAMPLE

Performance Check for Microsoft Power Apps

Review and rate your canvas apps yourself and make them faster where it counts

64 checkpoints | 7 areas | Workbook | Report template

Original pages from the 57-page handbook: the contents, chapters 01 and 03, and the first four checkpoints in the Data retrieval area from chapter 07. Other pages are omitted. The page numbers refer to the complete handbook.

Version 1.0 · As of November 15, 2026 · Reiner Keller, powerbunch GmbH

Contents

01	**Welcome**	3
02	**The package at a glance**	4
03	**Get results in six steps**	6
04	**The tools**	8
	Live monitor	8
	Monitor with metrics	9
	App checker	9
	Settings, tree view, and variables	10
05	**Measuring correctly**	11
06	**Rating and analysis**	13
07	**The 64 checkpoints**	15
	Platform & devices	16
	Data retrieval	19
	App structure & startup	23
	Formulas & variables	29
	SharePoint	37
	Dataverse, SQL & gateway	40
	Quality & operations	44
	Custom checkpoints	47
08	**Quick wins**	49
09	**Frequently asked questions**	50
10	**If you would like support**	51
A	**Appendix: License terms**	52

01

Welcome

Slow apps don't get used. I have been building and optimizing Power Apps canvas apps for businesses since 2018, and the same causes slow an app down again and again: too much data on the device, an overloaded startup, queries the data source cannot handle, and screens with too many controls.

This Performance Check helps you review your app in a structured, traceable way and measure the results. It guides you through 64 checkpoints in seven areas and explains how to check each one with the Power Apps tools. The workbook calculates the results automatically and sorts actions by impact and effort.

The check builds on my free guide "Power Apps Performance: 50 tips for fast canvas apps". There you will find further explanations and examples for many of the checkpoints. For most checkpoints, the workbook links to the matching tip.

Happy reviewing, and here's to fast apps,

Reiner Keller
Microsoft Power Platform expert
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Who it is for

For teams in business units and IT who build or maintain canvas apps, and for anyone who wants to make an existing app faster and more stable.

Prior knowledge

You know Power Apps Studio and can read formulas. For some checkpoints, you will need help from IT, for example with networking, the gateway, or the database.

Access

Edit permissions for the app (owner or co-owner). For region, gateway, and the metrics in Monitor, your Power Platform administrators can help.

Time required

For a medium-sized app, plan half a day to a full working day, and about one hour for the follow-up measurement.

03

Get results in six steps

From the fact sheet to the report: this is how the workbook guides you through the review.

1	2	3	4	5	6
Prepare	Measure baseline values	Review	Analyze	Plan and implement actions	Remeasure and report

1 Prepare

Fact sheet worksheet

Create a separate copy of the workbook for each app and fill in the fact sheet. The information on the data sources is especially important: if it says "No" for SharePoint, Dataverse, SQL Server, or gateway, the related checkpoints do not count.

Define three to five workflows that matter most to your users, such as "Open the app and view open orders", "Find an order", and "Edit and save an order". Measure these workflows before and after making changes.

Save a version of the app before each change using Save with version notes. Where possible, try actions in a copy of the app or in a development environment first.

2 Measure baseline values

Measurement log sheet

Measure before you change anything. The Measurement log distinguishes two types of data: take each of the seven individual measurements, such as the time until the start screen is usable, three times with a stopwatch or Live monitor. The workbook calculates the median. Record each of the seven metrics, such as success rates from Monitor, once for a fixed period. Record counts, such as the number of delegation warnings, as they stand at the time of measurement.

Record the measurement conditions: date, device, client and version, network, the version of the app reviewed, the test account or role, whether you measure the first or a repeated startup, and the dataset details. The chapter "Measuring correctly" describes how to measure reliably.

3 Review

Review sheet

Go through the checkpoints area by area. Read the question, follow the steps under "How to check", and compare the result with the criterion "Met if". Then rate it "Met", "Partially met", "Not met", or "Not applicable".

Under "Finding or note", record specifically what you saw: which screen, which formula, which value from Live monitor. This makes the actions easier later and the report more convincing.

A good way to start: first use Live monitor to record a typical process, from startup through search to saving. Many checkpoints in the areas Data retrieval, App structure & startup, and Formulas & variables can be answered with this one recording.

Impact and effort are defaults based on my experience. Adjust them if they don't fit your app, for example if an action would be particularly time-consuming for you.

4 Analyze

Analysis sheet

The Analysis sheet automatically calculates the overall result, the results for each area with a traffic light status indicator, rating progress, and the number of open actions at each priority. The chart shows the areas where the rated criteria are least fully met. Use the Measurement log and Live monitor recordings to identify the causes that actually take the most time. Check rating progress as well: if only a few checkpoints have been rated, the result is still preliminary.

Look at the actions with priority A first. They combine high impact with reasonable effort. Compare them with the measured values: where the app measurably waits the longest, an action brings the greatest gain.

5 Plan and implement actions

Action plan sheet

The Action plan lists all open items, sorted by priority. Enter the owner, due date, and status on the Review sheet. The Action plan copies them automatically. Actions marked "Done" no longer appear in the Action plan and no longer count as open. Check the item again after implementing the action and update its rating.

Implement actions one at a time and test the most important processes after each change. This shows you what each action achieves, and you can quickly find the cause if something stops working. Publish only when all tests have passed.

6 Remeasure and report

Measurement log sheet

After publishing, measure under the same conditions as before. The measurement log shows the change and the result for each measure.

Summarize the result with the report template. It is structured so that you can copy values and actions directly from the workbook. Finally, schedule the next review, for example quarterly and after major changes.

02 Data retrieval

Columns, delegation, query sizes, and targeted queries · 9 checkpoints (P08 to P16)

P08 Is explicit column selection turned on?

High impact | Low effort | All apps | Quick to implement

With explicit column selection, the app retrieves only the columns it actually uses. It is turned on by default in new apps but is often still turned off in older apps.

HOW TO CHECK

In Power Apps Studio, open Settings and check in the Updates section whether "Explicit column selection" is turned on.

MET IF

Explicit column selection is turned on.

ACTION

Turn the setting on, save the app, reload it, and test all screens. If a column is then missing because it only appears in a collection, name the column explicitly with ShowColumns.

POWER FX

```
// Name the columns explicitly when they are only used through a collection.
// Small tables only: ClearCollect is not delegable and loads at most
// as many records as the data row limit allows.
ClearCollect(colCustomers, ShowColumns(Customers, Name, City, Phone))
```

› Guide: tip 9 › Guide: tip 23 › Microsoft Learn: Fast calculations

P09 Does the app retrieve only the columns it needs for display and logic?

High impact | Low effort | All apps | Quick to implement

Every unnecessary column generates data traffic and takes up memory on the device. This affects mobile devices and weak connections in particular.

HOW TO CHECK

1. In Live monitor, open the data calls (getRows) at startup and on the most important screens and look at the columns requested.
2. Open collections in the Variables view and check whether they contain entire tables with all columns.

MET IF

Data calls and collections contain only columns that are displayed or needed in formulas.

ACTION

Limit columns with ShowColumns or DropColumns and remove unused columns from views and collections.

› Guide: tip 9 › Guide: tip 39 › Microsoft Learn: Small data payloads - limit the amount of data you get

P10 Are all queries on data sources that can grow beyond the data row limit delegable?

High impact | Medium effort | All apps

The app processes non-delegable queries itself, and only up to the data row limit. The app becomes slow, and with large amounts of data, records are missing from the result without anyone noticing.

HOW TO CHECK

1. In Power Apps Studio, look for all formulas with a delegation warning (yellow warning triangle, blue wavy underline).
2. Open App checker and review the delegation warnings.
3. Warnings appear only for delegable data sources and not in every case. Therefore, also compare every query on large or growing tables with the delegation list of the respective connector.
4. In a copy of the app, temporarily set the data row limit to 1. Non-delegated queries then return only one record and are noticed immediately during testing. Afterwards, restore the previous value.
5. For each affected query, record how large the table is today and how large it can become.

MET IF

All queries on large or growing data sources are delegable, checked with the connector's delegation list and the test with a data row limit of 1. Non-delegated processing only affects small tables that fit completely under the data row limit.

ACTION

Replace non-delegable functions and operators with delegable ones, simplify conditions, or move the processing into a view in the data source. Collections (Collect, ClearCollect) are themselves not delegable: therefore, bind large lists directly to the filtered data source.

POWER FX

```
// The data source filters, the device only receives the result.
// Delegable if the connector supports Filter on these columns
// (check the connector's delegation list).
Filter(Orders, Status = "Open" && OrderDate >= DateAdd(Today(), -30))
```

› Guide: tip 11 › Microsoft Learn: Query limitations: Delegation and query limits

P11 Has the data row limit for non-delegable queries been chosen deliberately?

Medium impact | Low effort | All apps | Quick to implement

The data row limit is 500 by default and can be changed in Power Apps Studio under Settings › General. Since October 2026, Microsoft's English delegation overview has stated a maximum of 10,000, while the German version of that page still states 2,000. In my test on November 15, 2026, the highest value I could set was 2,000. Check the settings in your environment to see which maximum you can set. A higher value merely postpones the delegation problem and makes non-delegable queries slower, especially for wide tables with many columns.

HOW TO CHECK

In Settings under General, read the data row limit that is set and compare it with the delegation warnings.

MET IF

The limit has been chosen for good reason and has not been raised across the board to hide delegation problems.

ACTION

Solve delegation problems at the root and set the limit only as high as the remaining small tables need.

› Guide: tip 11