## 🚀 Quick Start — Device Compliance & Patch Health Dashboard

**Purpose**

This dashboard provides visibility into endpoint compliance and patch health using realistic IT operations data. It is designed to demonstrate data modeling, DAX, and operational reporting concepts rather than serve as a production system.

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### 1️⃣ Open the Project

1. Clone or download the repository
2. Navigate to:
3. Project-02-Device-Compliance/
4. Open the Power BI file:
5. /pbix/Device-Compliance.pbix

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### 2️⃣ Load the Data

If prompted to refresh data:

1. Ensure the following CSV files exist in the /data folder:
    - Users.csv
    - Devices.csv
    - ComplianceChecks.csv
    - PatchEvents.csv
2. Click **Refresh** in Power BI
3. Confirm all tables load without errors

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### 3️⃣ Data Model Overview

The dashboard uses a star-style model:

- **Users → Devices** (assigned user)

- **Devices → ComplianceChecks** (weekly compliance events)
- **Devices → PatchEvents** (monthly patch events)
- **Date table** connected to:
    - ComplianceChecks via CheckDate
    - PatchEvents via PatchReleaseDate

This allows all visuals to respond correctly to date, location, OS, and device filters.

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## 4️⃣ Dashboard Pages

### 📄 Page 1 — Compliance Overview

Use this page to:

- Monitor overall device compliance
- Track compliance trends over time
- Identify non-compliance by OS and device type
- Understand top compliance failure reasons

**Recommended filters:**

- Date range
- Location
- Department
- Operating System

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### 📄 Page 2 — Patch Health

Use this page to:

- Monitor patch installation success
- Identify pending or failed patches
- Track patch SLA performance (installed within 7 days)
- Prioritize overdue patch remediation

**Key operational table:**

- Devices with pending or failed patches
- Sorted by days since patch release

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### 5️⃣ How to Use the Date Filters

- **Page 1:** Date slicer represents *compliance check dates*
- **Page 2:** Date slicer represents *patch release window*

Adjusting the date range will dynamically update KPIs, charts, and tables.

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### 6️⃣ Intended Use

This project is intended to:

- Demonstrate Power BI modeling and reporting skills
- Simulate realistic endpoint compliance scenarios
- Support portfolio review and technical discussions

All data is synthetic and used for demonstration purposes only.

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### 7️⃣ Customization Ideas (Optional)

- Add conditional formatting to highlight overdue patches
- Introduce compliance targets (e.g., 95%) using KPI visuals
- Extend the data with additional months or devices
- Add drill-through pages for device-level analysis