DYNAMIC AI

Modern Business Intelligence: 25 Years of Innovation

A ~~Deep~~ Dive into Our Next-Generation Platform

Carsten Sørensen, CINTAC A/S

04.04.2025 Scanduc

Agenda & Overview

- Introduction & Legacy
- Modernization Journey
- Architecture & Platform
- Data Connectivity
- Reporting & Analytics
- All-in-One Solution
- Competitive Landscape
- Q&A

Our Legacy & Market Presence

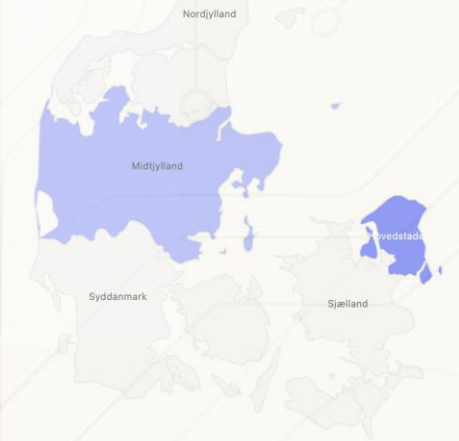
- 25 Years of Operation
- Data Access since 2003…
- Trusted Globally
- Key Industries: Finance, Manufacturing, Legal
- Proven Impact

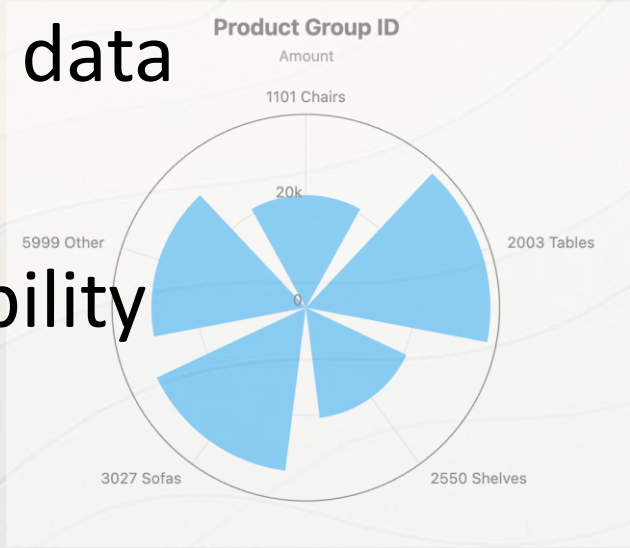
The Modernization Journey

- Windows 32 to Windows 64 + Linux
- From x86 to x86 + ARM64
- From VB6 to C++
- From IIS to included Apache/nginx
- SPA Responsive Frontend (Lit & Material)
- Automated Testing (C++ & Cypress)

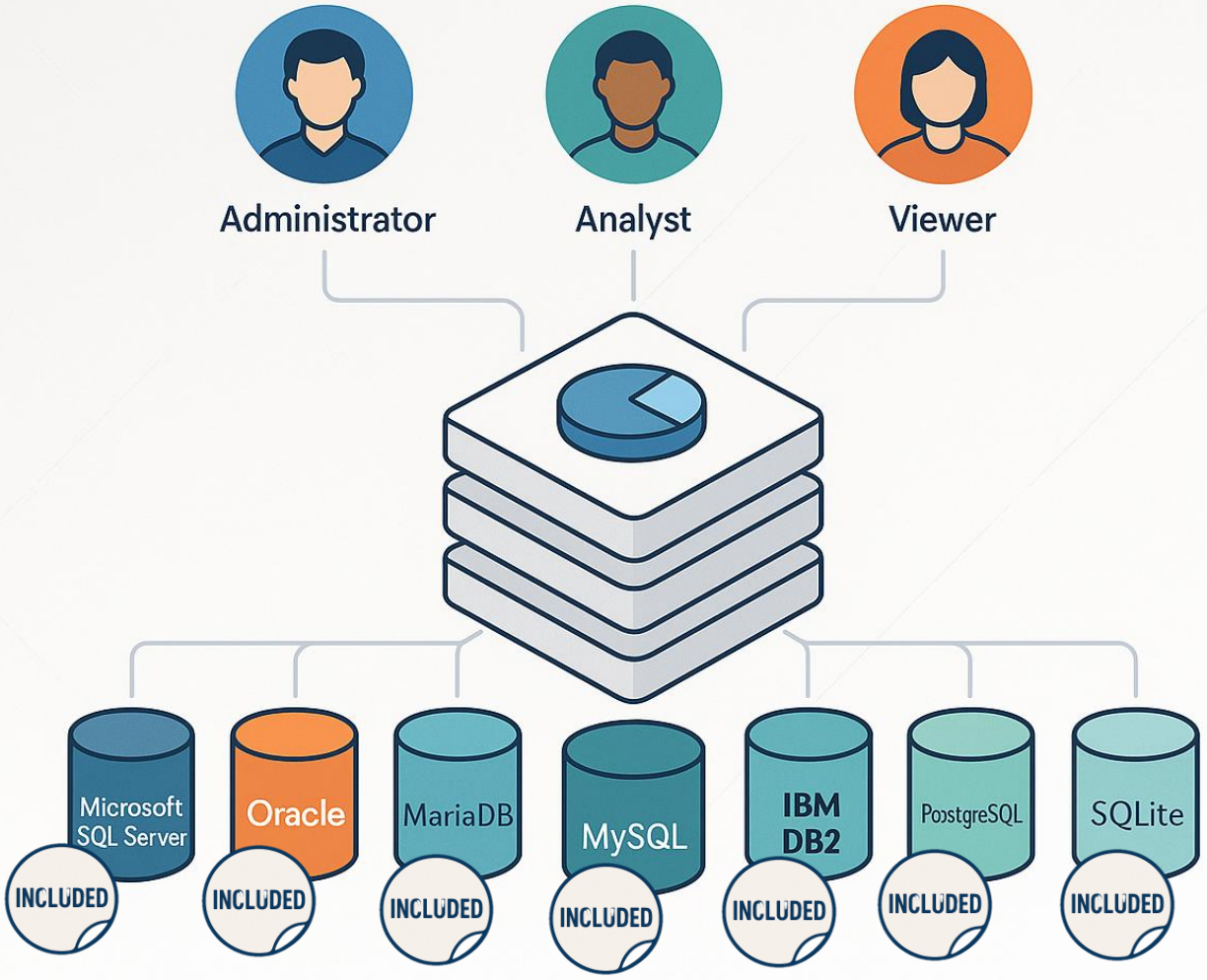
Architecture & Platform Overview

- 64-bit UTF8 for Windows & Linux
- Modular, Multi-tier Design
- Newest Chart and Maps library
- Embedded VS Code editor
- JSON templating and JSON data
- REST API
- High Performance & Scalability

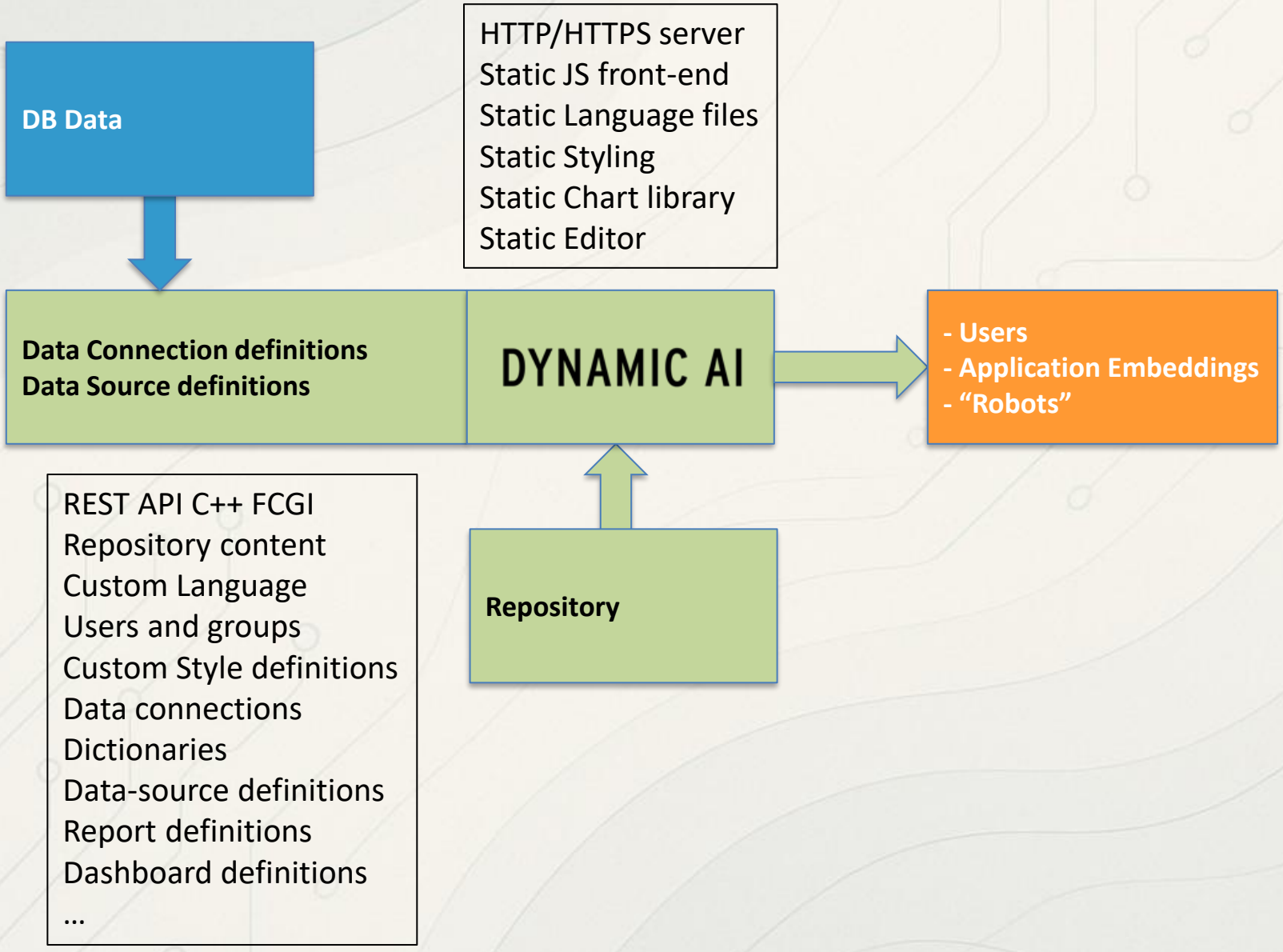




Data Connectivity & Integration



Architecture Diagram



Feature Showcase – Reporting & Analytics

- Interactive Reports, Charts & Maps
  - Scrolling, big table handling, freezed panes
- Customizable Dashboards
  - Open on top / drill-down
- In-app Editing & Exports
  - Capture mappings, note taking
- Command Line Reporting
  - Scheduled reporting / backend creation

Frontend & User Experience

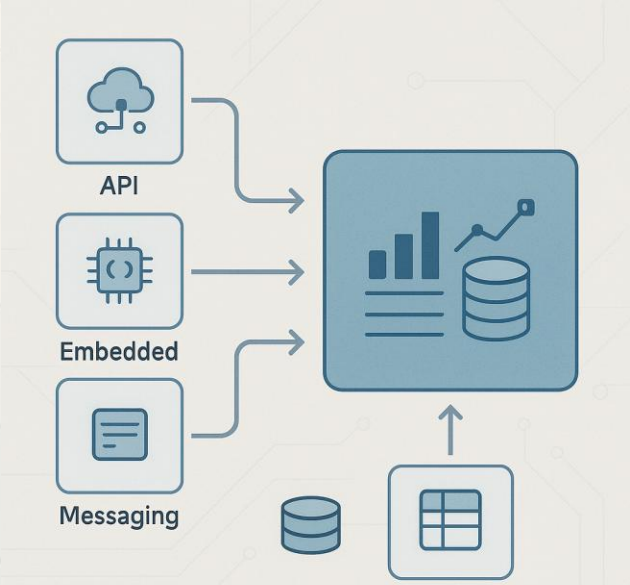
- Modern, Responsive UI
- Declarative JSON Templates
- Evergreen Browser & Mobile Support

UI itself:

- “Less is More” …
- “Data is the king”
- 80/20 … 90/10 … rules
- Navigate List / cards – selectors / search

Integration & Extensibility

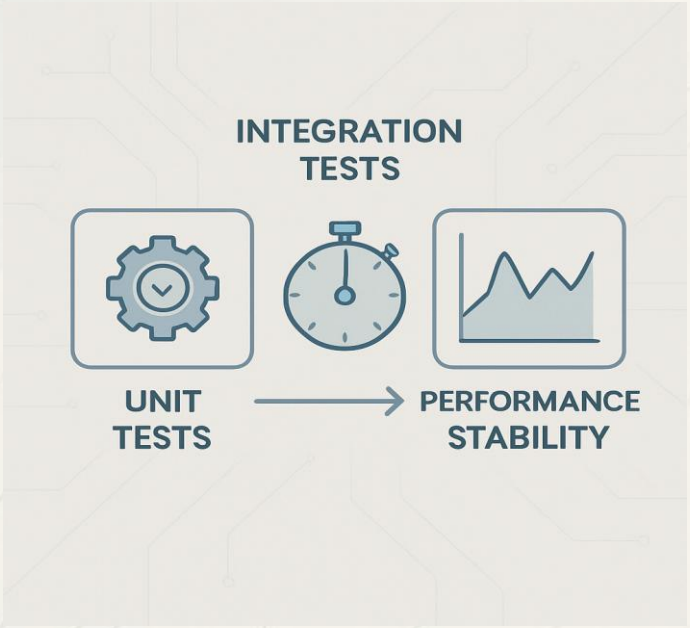
- Embedded Mode (IFRAME / OBJECT)
- Messaging object for Host Integration
- …REST API for Customization



Security Enhancements

- SQL Binding
- XSS Protection (Lit)
- Content Security Policy

Testing & Reliability

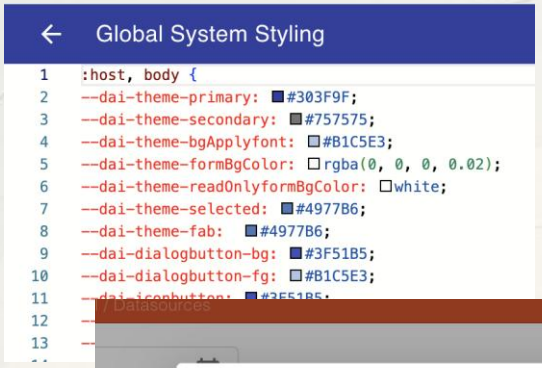


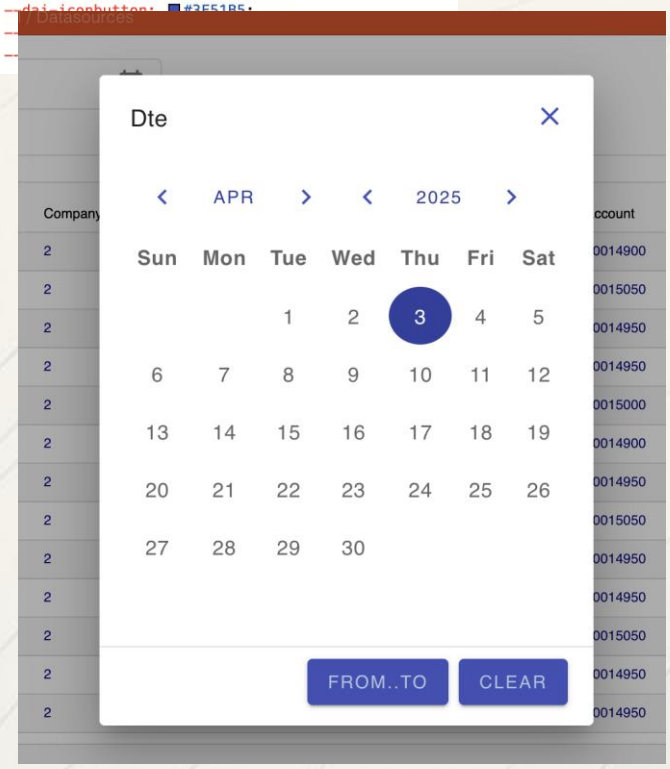
- C++ Unit Tests
- Extensive Cypress Tests
- Performance Under Load

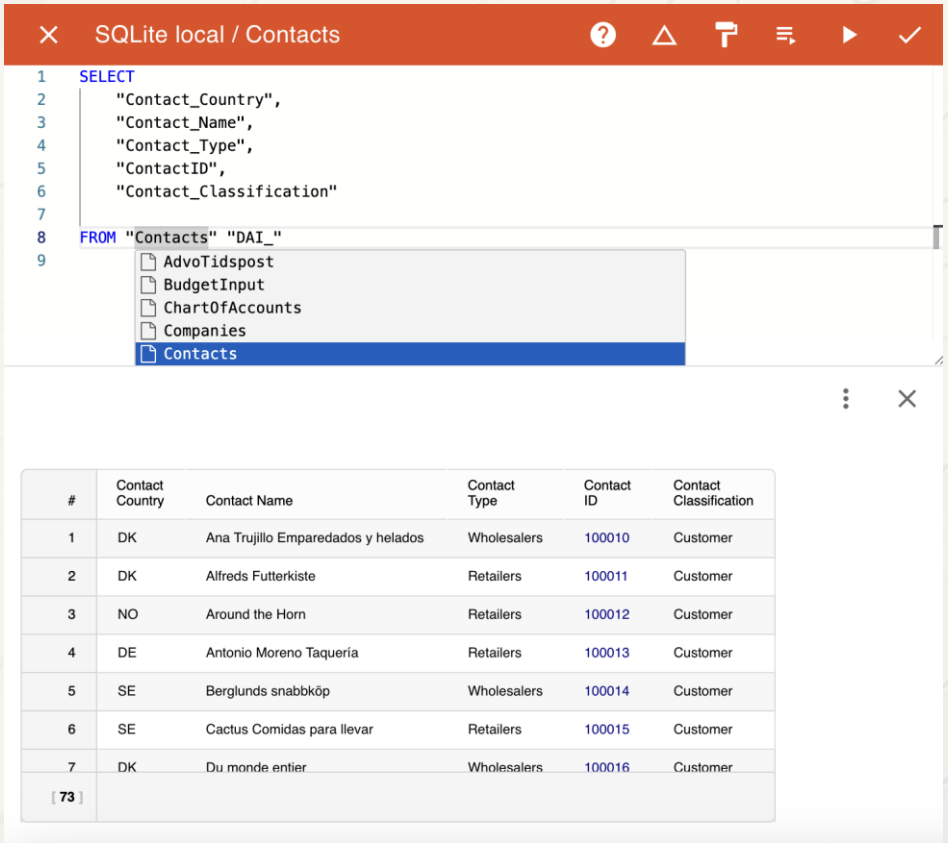
… a bit like in DataFlex

- Same TechStack - 64 bit UTF-8 + Windows, Linux
- Same DB's (Oracle, MS SQL, MySQL …)
- Similar SQL, Table, Dictionary, SQL, Preview logic
- Styling also with –global vars
- Structs = DAI JSON Objects
- Integrates with webview2 messaging
- Etc.

… a bit like in DataFlex







… a bit like in DataFlex

DATA2014 company 2

SQLite local / Datasources

#	ID	Company	Dte	Reference	Description	Account	Amount	Version	Product	Employee	Contact	Hrs
1	5573	2	2014-01-01	12852	Development secondary wood	10014900	16,889	1	21	151	100091	4
2	5576	2	2014-01-15	12855	Enlarge secondary wood	10015050	5,761	1	10	143	100012	6
3	5579	2										7
4	5583	2										4

Sources | Network | Performance | Memory | Application | Privacy and security | Lighthouse | Recorder | AdBlock

e log | Disable cache | No throttling

Invert | More filters | All | Fetch/XHR | Doc | CSS | JS | Font | Img | Media | Manifest | WS | Wasm | Other

Headers | Payload | Preview | Response | Initiator | Timing


```
properties: {level: 0, connectiontype: 3, drillprevious: "", anydetails: true, recordnumber: 0, recordto: 0,…}
referenceid: "1"
reportelements: {nodetype: "reportelements", namespace: "dynamicai.repository", owner: 1,…}
  fields: [{name: "ID", type: "Integer", data: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 108]},…]
  namespace: "dynamicai.repository"
  nodetype: "reportelements"
  owner: 1
runreport: {namespace: "custom", nodetype: "runreport",…}
  fields: [{name: "###1", type: "Integer",…}, {name: "###2", type: "Integer",…},…]
    0: {name: "###1", type: "Integer",…}
      data: [5573, 5576, 5579, 5583, 5586, 5589, 5593, 5596, 5599, 5603, 5606, 5609, 5613, 5616, 5619, 5623, 5626,…]
      name: "###1"
      type: "Integer"
    1: {name: "###2", type: "Integer",…}
    2: {name: "###3", type: "DateTime",…}
    3: {name: "###4", type: "Integer",…}
    4: {name: "###5", type: "String",…}
      data: ["Development secondary wood", "Enlarge secondary wood", "Focus secondary wood",…]
      name: "###5"
      type: "String"
    5: {name: "###6", type: "Integer",…}
    6: {name: "###7", type: "Real",…}
    7: {name: "###8", type: "Integer",…}
    8: {name: "###9", type: "Integer",…}
    9: {name: "###10", type: "Integer",…}
```


http://localhost:8080/DynamicAI/run/reports/1?

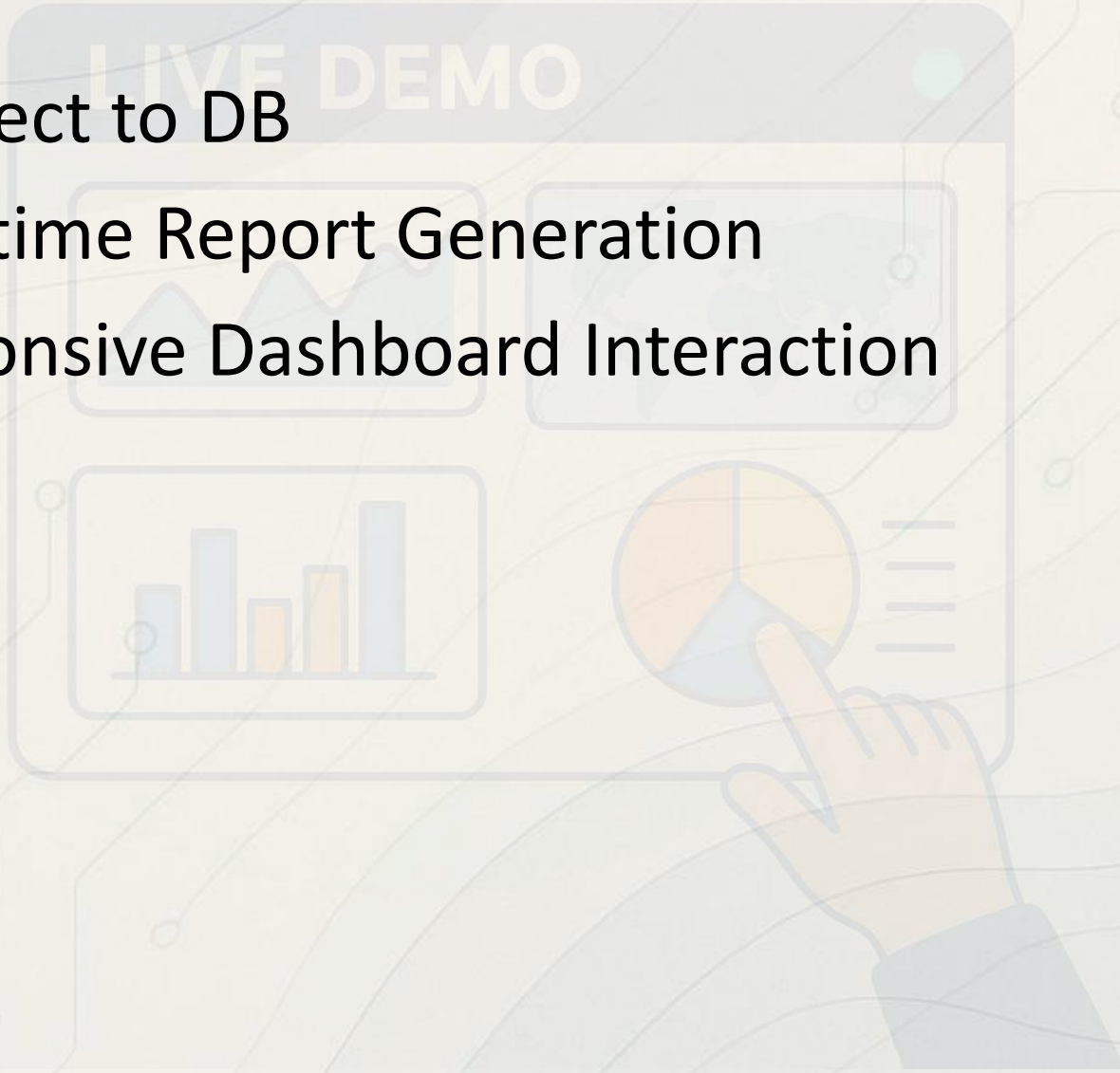
GET

200 OK

AI

Live Demo

- Connect to DB
- Real-time Report Generation
- Responsive Dashboard Interaction

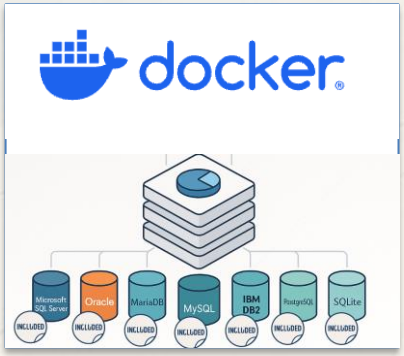


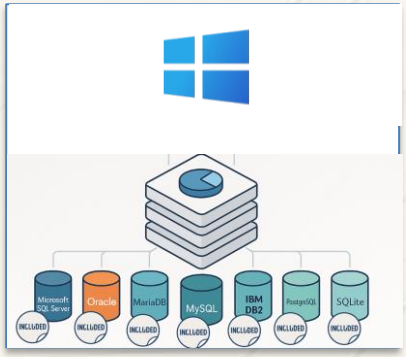
All-in-One Solution Benefits & Architecture

- Multi-layered user, role-and group based access
- Central repository for reports/modules
- Distributed administration and development

Closing, Roadmap & Next Steps

– 2 versions currently available:





– Future Roadmap
  - More Import and Export Module / design
  - More Chart options
  - More dashboard layouts
  - AI button in v7 …

– Contact DAE for Demos/Trials

Q&A

- Questions?
- => multiple databases / systems
- => French … dictionary column captions
- => Migration tool for v6 to v7 available