

Discover What's New Part 1

DI Cambridge

DIUC 2022

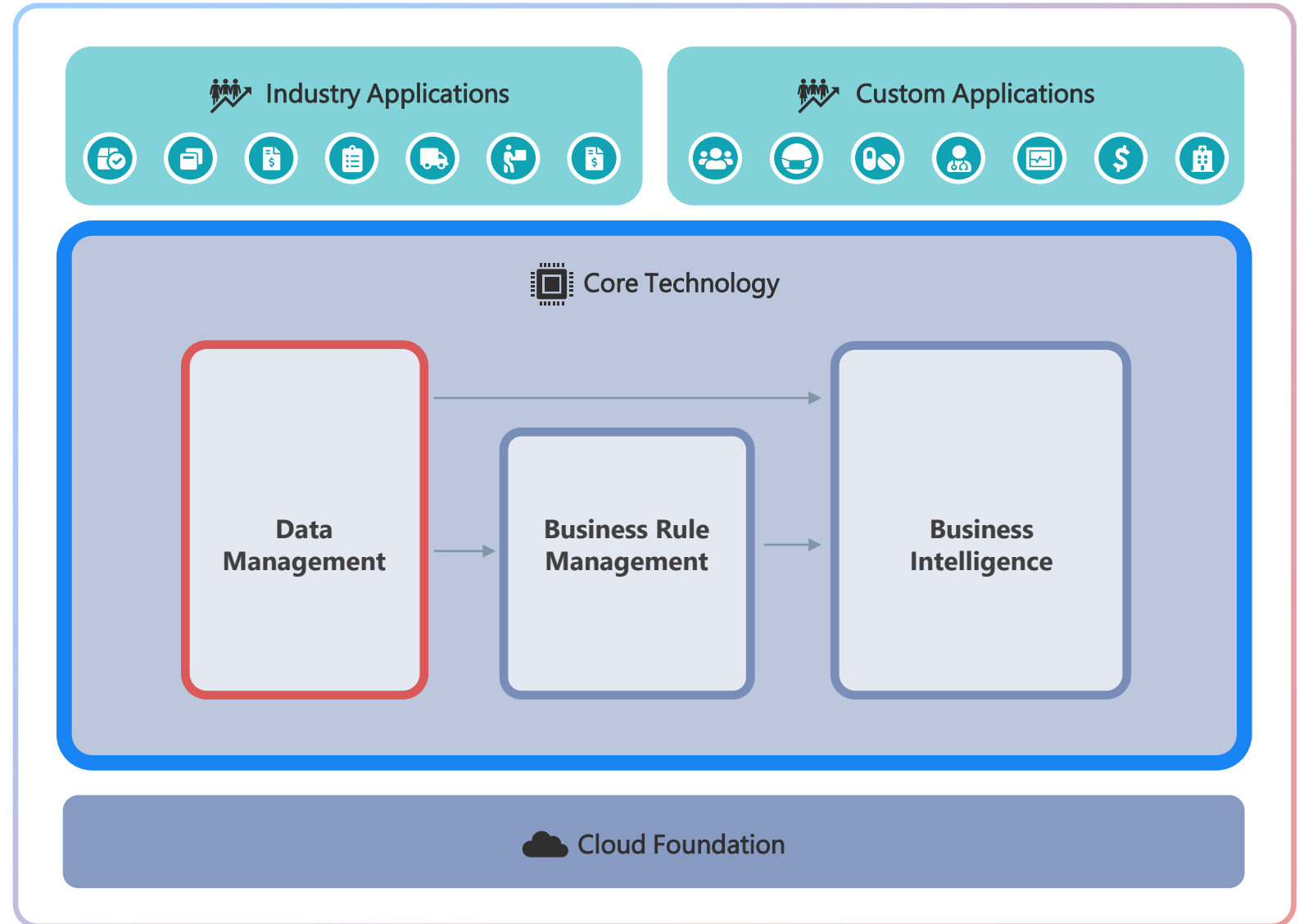
Diver Platform 7.2 – Improvements

Business Intelligence

- “My Library”
- Quickviews improvements

Data Management

- Spectre improvements
- DiveLine improvements
- Workbench improvements



Hospital Operations
CURRENT

Today

Yesterday

Month

Share Print

HOSPITAL OPERATIONS LAST REFRESHED: Thursday, June 23, 2022 at 05:00
CENSUS REFRESHED: Friday, June 18, 2021 at 18:35

CENSUS FACILITY All Values (4)

Current Inpatient Census

Current	Yesterday	% +/-
213	205	3.9%

Avg Current Inpatient LOS

Current	Yesterday	% +/-
9.5	9.1	4.4%

Cumulative Admissions - Current Hr

Current	Yesterday	% +/-
34	38	-10.5%

Current Observation Census

Current	Yesterday	% +/-
39	55	-29.1%

Avg Current Observation LOS Hrs

Current	Yesterday	% +/-
26.8	29.8	-9.9%

Cumulative Discharges - Current Hr

Current	Yesterday	% +/-
41	39	5.1%

LACE Score >= 10

Current	Yesterday	% +/-
3	3	0.0%

AMI Patients (Historical)

Current	Yesterday	% +/-
1	1	0.0%

CHF Patients (Historical)

Current	Yesterday	% +/-
6	5	20.0%



My Library



Today

Yesterday

Month



SHORTCUTS

Edit

Shared Folders



COMPANY WIDE

ED Visit Info

Inpatient →
Trends

Rev: Exec



DEPARTMENT

George's
Dashboard

Rev: Executive



NEW SHORTCUT FOLDER

Videos & Documentation



HOW TO VIDEOS

Create a
shortcut

Manage your
shortcuts

Share your
shortcuts

Create a self-
service page



INTRO. VIDEOS

Hospital
Operations

Revenue Cycle
Advisor

Emergency
Department
Advisor

Ambulatory
Operations

 My Library

Today

Yesterday

Month



DOCUMENTATIONS

Hospital Operations



GENERAL

Measure
Dictionary

Ad Hoc Analysis

Stamp Library

[Hidden Pages]



EXECUTIVE DASHBOARD

Executive
Dashboard

Option 1

Option 2



CURRENT

Today

Yesterday

Month



INPATIENT

Overview

Trends

Compare



OUTPATIENT

Overview

Trends

Compare



OUTCOMES

Overview

Hospital
Mortality

ALOS

Hospital Operations
VISUALIZATIONS

Executive
Dashboard

Current

Inpatient

Outpatient

Outcomes

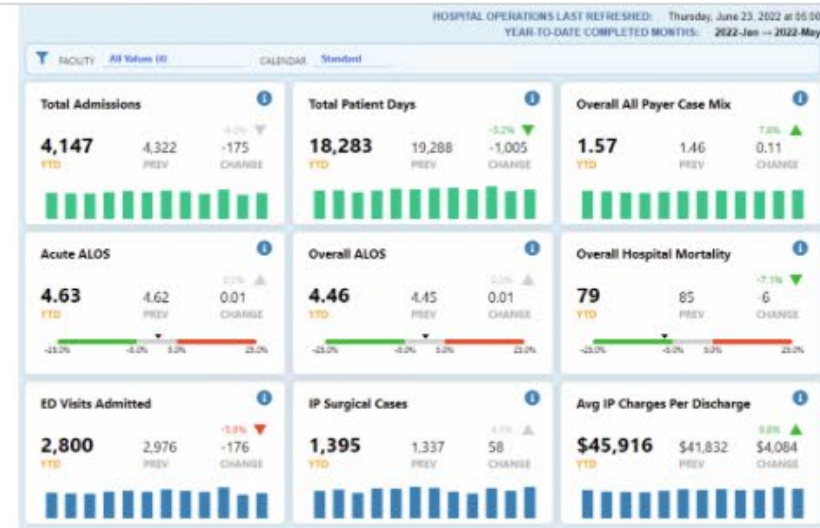
Physicians

Census

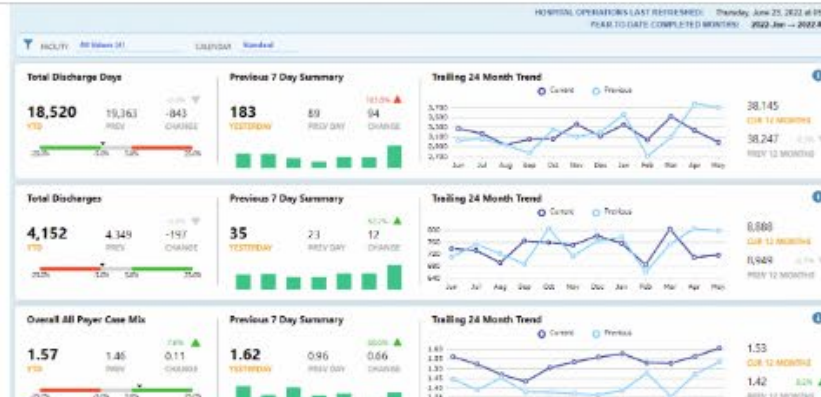
Share Print



Executive Dashboard



Option 1





Dimensional
INSIGHT

HOSPITAL OPERATIONS

VERSION 4.2

POWERED BY DIVER PLATFORM

MY ACCOUNT HELP LOG OFF

Hospital Operations
INPATIENT

Overview

Trends

Compare

Share Print

HOSPITAL OPERATIONS LAST REFRESHED: Thursday, June 23, 2022 at 05:00

YEAR-TO-DATE SUMMARY: 2022-Jan → 2022-Jun



FACILITY All Values (4)

CALENDAR

Standard

Measures

Volumes

	MONTH TO DATE			CURRENT COMPLETE MONTH			YEAR TO DATE		
	Jun-2022	Jun-2021	% +/-	May-2022	May-2021	% +/-	2022	2021	% +/-
Total Admissions	494	525	-5.9% ▼	717	795	-9.8% ▼	4,147	4,322	-4.0% ▼
Acute Admissions	468	498	-6.0% ▼	667	756	-11.8% ▼	3,867	4,047	-4.4% ▼
Total Newborns	30	28	7.1% ▲	51	43	18.6% ▲	292	285	2.5% ▲
Total Discharges	481	554	-13.2% ▼	717	799	-10.3% ▼	4,152	4,349	-4.5% ▼
Acute Discharges	454	525	-13.5% ▼	664	758	-12.4% ▼	3,870	4,070	-4.9% ▼
ED Admissions	334	358	-6.7% ▼	490	538	-8.9% ▼	2,883	2,972	-3.0% ▼
IP Surgical Cases	178	175	1.7% ▲	271	250	8.4% ▲	1,395	1,337	4.3% ▲
Total Discharge Days	2,367	2,486	-4.8% ▼	2,997	3,713	-19.3% ▼	18,520	19,363	-4.4% ▼
Acute Discharge Days	2,312	2,434	-5.0% ▼	2,879	3,631	-20.7% ▼	17,919	18,784	-4.6% ▼
Normal Newborn Discharge Days	55	52	5.8% ▲	118	82	43.9% ▲	601	579	3.8% ▲
Total Patient Days	2,142	2,251	-4.8% ▼	3,166	3,754	-15.7% ▼	18,283	19,288	-5.2% ▼
Acute Patient Days	2,088	2,202	-5.2% ▼	3,057	3,676	-16.8% ▼	17,686	18,714	-5.5% ▼
Normal Newborn Patient Days	54	49	10.2% ▲	109	78	39.7% ▲	597	574	4.0% ▲

Ratios

Overall ALOS	4.92	4.49	9.7% ▲	4.18	4.65	-10.1% ▼	4.46	4.45	0.2% ▲
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My Library



Inpatient:
Overview



SHORTCUTS

Edit

Inpatient:
Overview

Shared Folders ^

Videos & Documentation v



HOW TO VIDEOS

Create a
shortcut

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service page



INTRO. VIDEOS

Hospital
Operations

Revenue Cycle
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Advisor

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Operations



DOCUMENTATIONS

Hospital Operations v



GENERAL

Measure
Dictionary

Ad Hoc Analysis

Stamp Library

[Hidden Pages]

Add Measures

Select measures

search

Collapse all

ED Throughput (0/2)

Hospital Acuity (0/10)

Hospital Revenue (0/12)

Hospital Volumes (2/59)

☒ Acute Admissions

☐ Acute Admit % ED

☐ Acute Discharge Days

☒ Acute Discharges

☐ Acute Patient Days

☐ Diagnoses

☐ ED Admissions

☐ Hospice Admissions

☐ Hospice Discharge Days

☐ Hospice Discharges

☐ Hospice Patient Days

☐ ICU Days

☐ ICU Discharge Days

☐ ICU Discharges

☐ In-House Accounts

☐ In-House Admission Days

☐ IP Admissions

ED Volumes (0/6)

Hospital Population (0/5)

Hospital Throughput (0/24)

Outcomes Mortality (0/4)

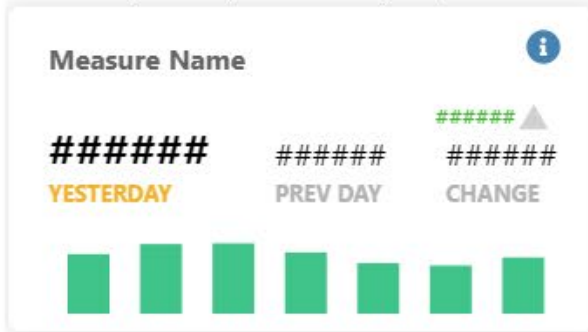
OK

Cancel

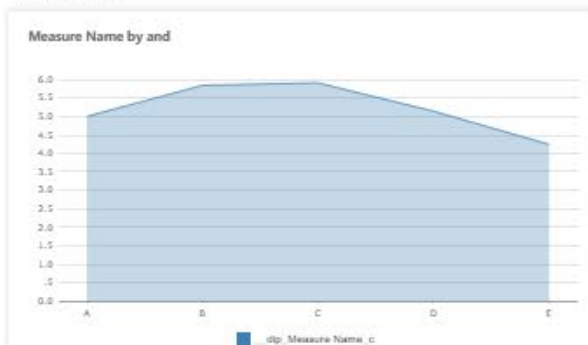
Add Measures

Select a stamp type

Last 7 Completed Days - Bar Chart (Small)



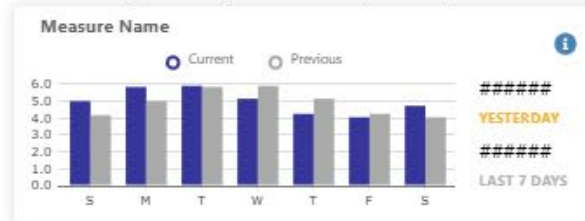
Area Chart



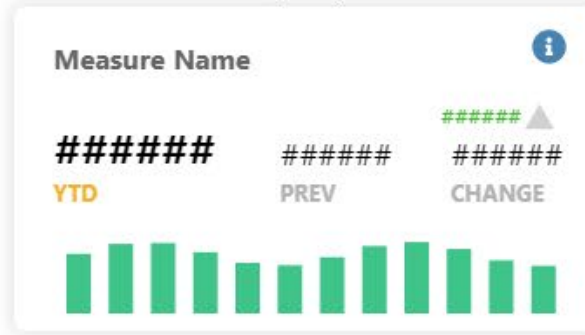
Yesterday - slider chart (Small)



Last 7 completed days - bar chart (Medium)



Year-to-Date - Bar Chart (Small)



Last 7 completed days - bar chart (Small)



Back Cancel

 Shortcuts

 Inpatient:
Overview

My Page

  Share Print 

Acute Admissions


32

YESTERDAY

24

PREV DAY

33.3%



8

CHANGE



Acute Discharges


34

YESTERDAY

21

PREV DAY

61.9%



13

CHANGE





My Library



Inpatient:
Overview

My Page



SHORTCUTS

Save

Inpatient:
Overview

My Page

Shared Folders



COMPANY WIDE

ED Visit Info

Inpatient →
Trends

Rev: Exec



DEPARTMENT

George's
Dashboard

Rev: Executive



NEW SHORTCUT FOLDER

Videos & Documentation



HOW TO VIDEOS

Create a
shortcut

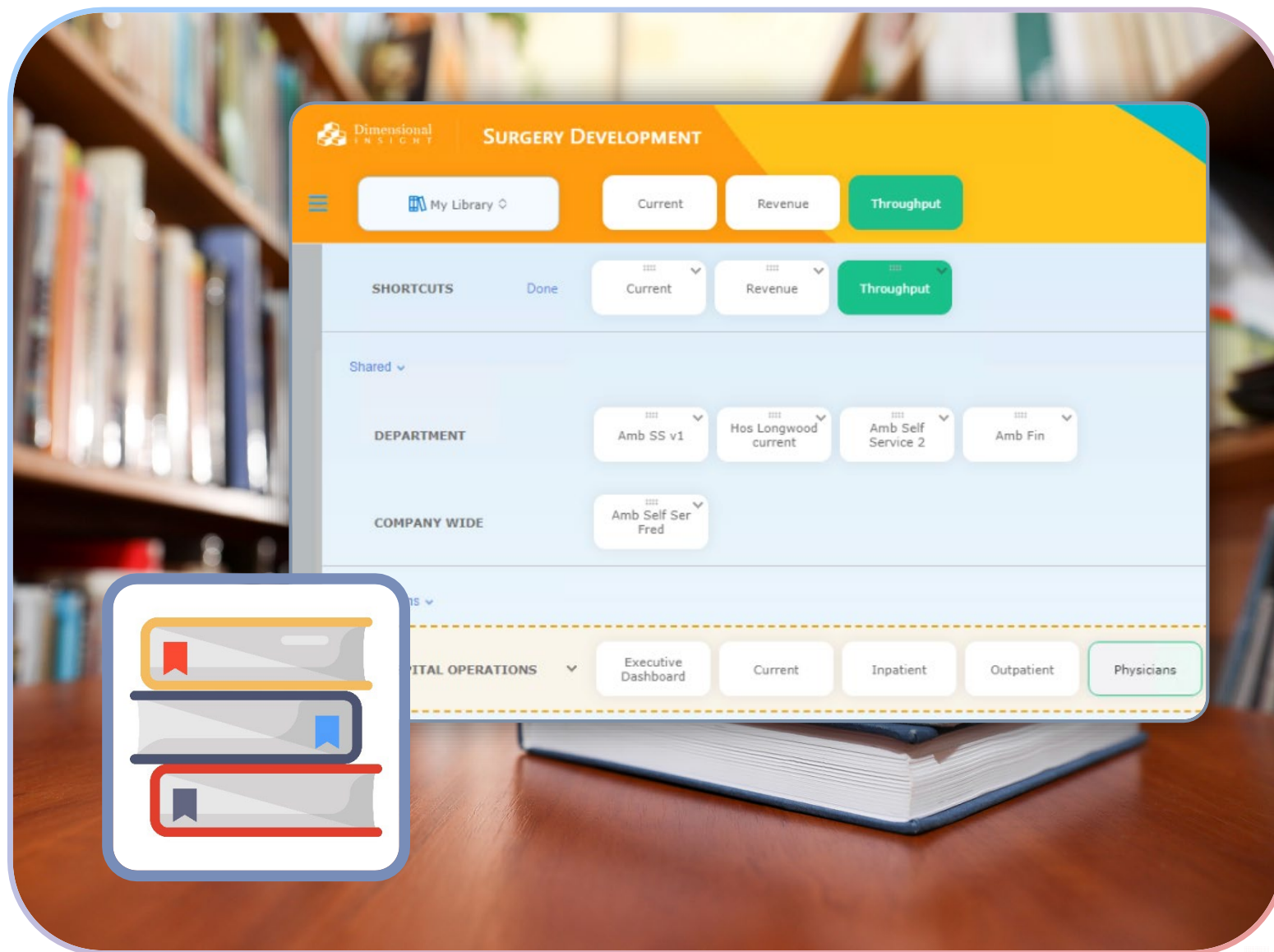
Manage your
shortcuts

Share your
shortcuts

Create a self-
service page

My Library

- New interface mode: "My Library" in 7.2
- Earlier modes were "Classic" and "Simplified"
- My Library brings a powerful dynamic navigation system
- Reach more displays with fewer clicks
- Customizable shelf icons and extra icons for "special page"
- Opt-in if you're migrating from 7.1



My Library – Navigation

Everything at your fingertips

The screenshot displays the 'Hospital Analytics' navigation interface. At the top, the 'Dimensional INSIGHT' logo is on the left, and the title 'Hospital Analytics' is in the center. Below the title is a horizontal navigation bar with several buttons: 'Hospital Operations GENERAL' (with a pie chart icon and a dropdown arrow), 'Executive Dashboard 1', 'Executive Dashboard 2', 'Executive Dashboard 3' (highlighted in blue), 'Physicians', and 'Measure Dictionary'. Below this bar are three main sections. The first section, 'SHORTCUTS', includes an 'Edit' link and three shortcut buttons: 'HC Executive Dashboard #1', 'Ambulatory Exe. Dashboard #2 Longwood', and 'My KPIs'. The second section, 'DEPARTMENT', has a 'Shared' dropdown and two buttons: 'Department Shortcut #1' and 'Department Shortcut #2'. The third section, 'Hospital Operations', has a dropdown menu and a row of buttons: 'Executive Dashboard 1', 'Executive Dashboard 2', 'Executive Dashboard 3' (highlighted in blue), 'Physicians', and 'Measure Dictionary'.

Dimensional INSIGHT | Hospital Analytics

Hospital Operations GENERAL > Executive Dashboard 1 Executive Dashboard 2 Executive Dashboard 3 Physicians Measure Dictionary

SHORTCUTS Edit HC Executive Dashboard #1 Ambulatory Exe. Dashboard #2 Longwood My KPIs

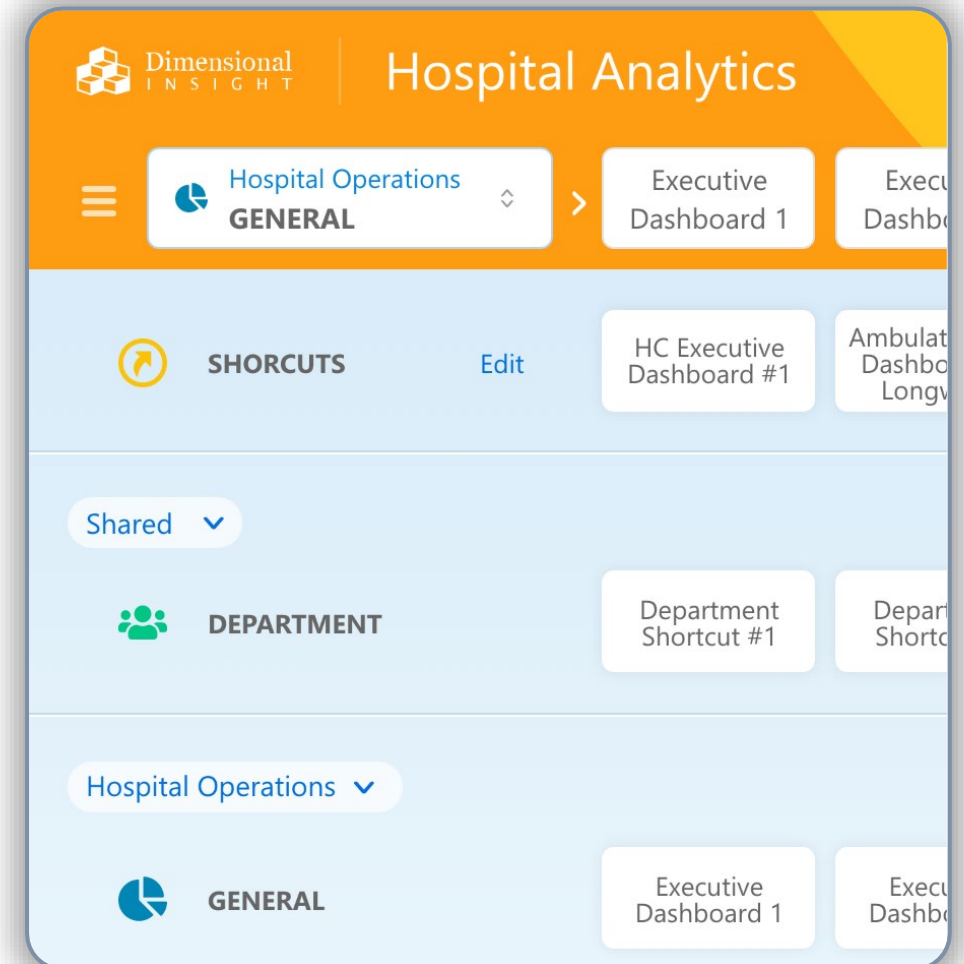
Shared DEPARTMENT Department Shortcut #1 Department Shortcut #2

Hospital Operations GENERAL Executive Dashboard 1 Executive Dashboard 2 Executive Dashboard 3 Physicians Measure Dictionary

My Library – Navigation

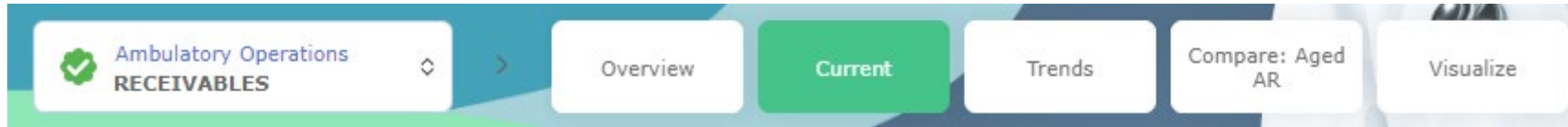
New “My Library” Interface mode in DivePort

- Faster navigation
- More complete view of available pages
- Shortcuts (or bookmarks) are easier to reach



My Library – Interface

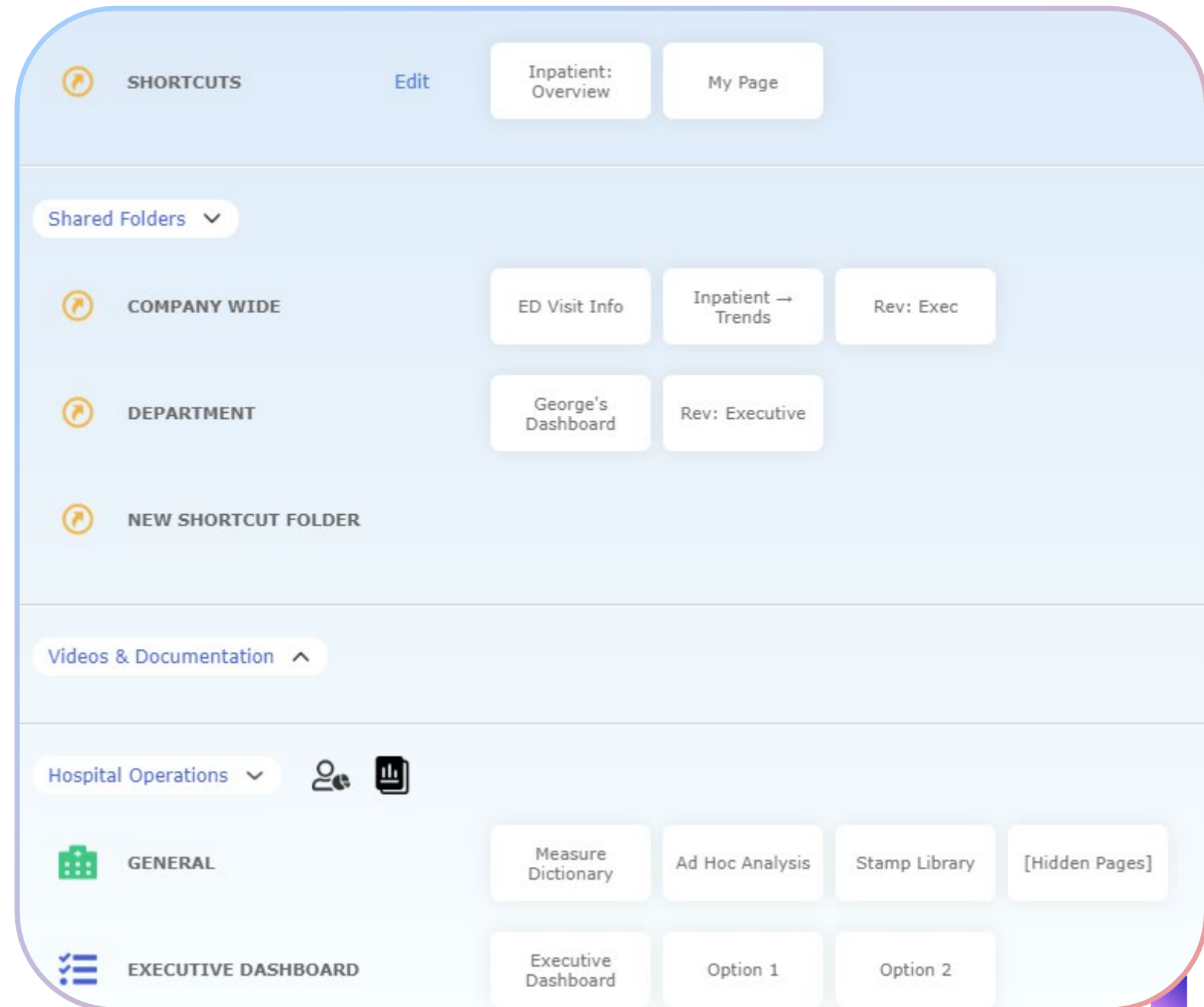
Library Bar



- Show current page and “nearby” displays
- Quick access to all displays through the library button

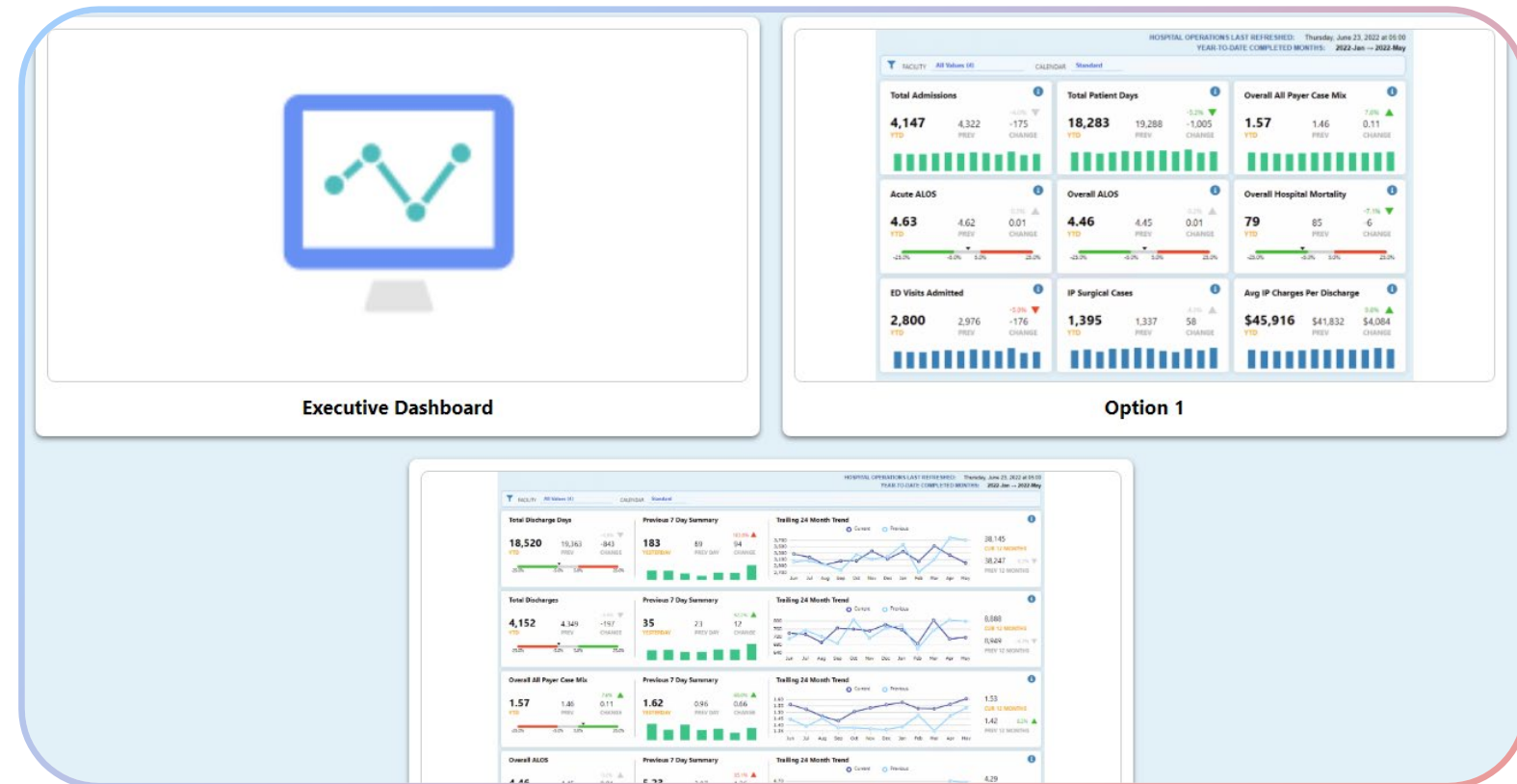
My Library – Popup

- Your whole portal, at a glance
- Sections, shelves, buttons
- Icons for special features
- Easy access to shortcuts and shared folders



My Library – Menu Portlet “Gallery” Mode

- New mode for the Menu Portlet
- Bigger images, better for screenshots
- Special video link option



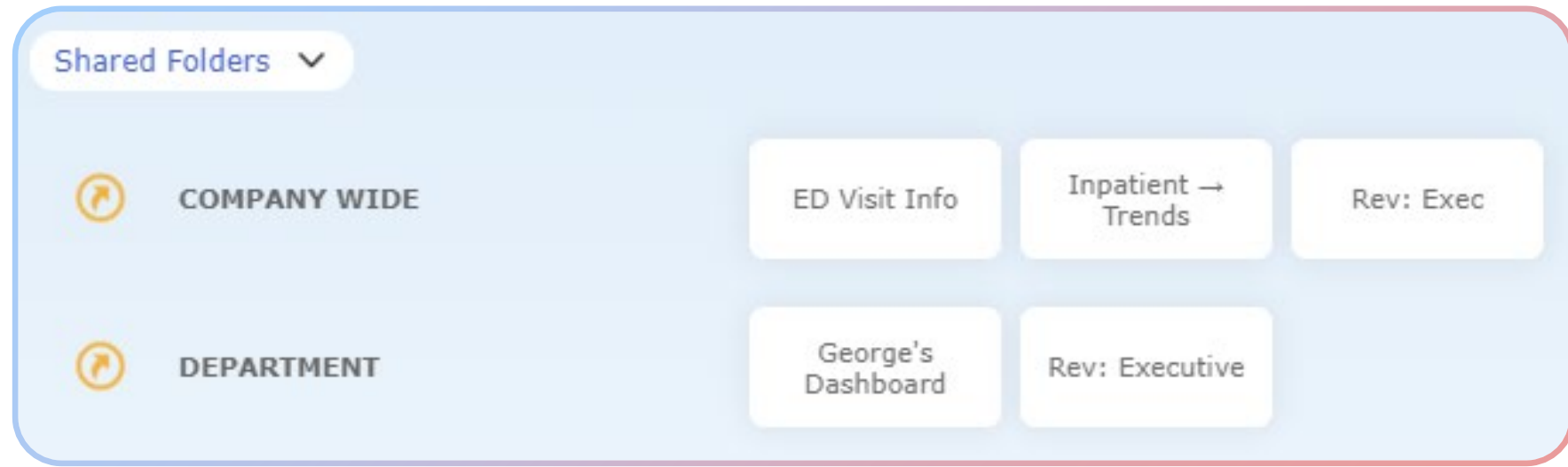
My Library – Shortcuts

- New “Shortcut” system, for use in place of DivePort Bookmarks
- Shortcuts are stored on DiveLine
- Can target a DivePort page or a URL (more to come)
- Easier to reach and manage
- Your first shortcut is your landing page



My Library – Shared Folders

- Create “Shared Folders” on DiveLine
- Groups of users can share shortcuts
- Uses standard DiveLine file access controls



My Library – Simpler Self Service

- New measures dialog in Self Service
- Add multiple measures at once
- New Measure Factory config option: default stamp type
- If set, users can add stamps even faster

select measures

search

Collapse all

ED Throughput (0/2)

- ☐ ED Admits LOS ED1 Median
- ☐ ED Departs LOS OP18 Median

Hospital Acuity (0/10)

- ☐ Acute All Payer Case Mix
- ☐ Average LACE Acuity Score
- ☐ Average LACE Comorbidity Score
- ☐ Average LACE ED Score
- ☐ Average LACE LOS Score
- ☐ Average LACE Score

ED Volumes (0/6)

- ☐ ED AMA/ Incomplete Treatment
- ☐ ED Visits
- ☐ ED Visits Admitted
- ☐ ED Visits Admitted %
- ☐ ED Visits DC Obs
- ☐ ED Visits Departed

Hospital Population (0/5)

- ☐ AMI Population
- ☐ COPD Population

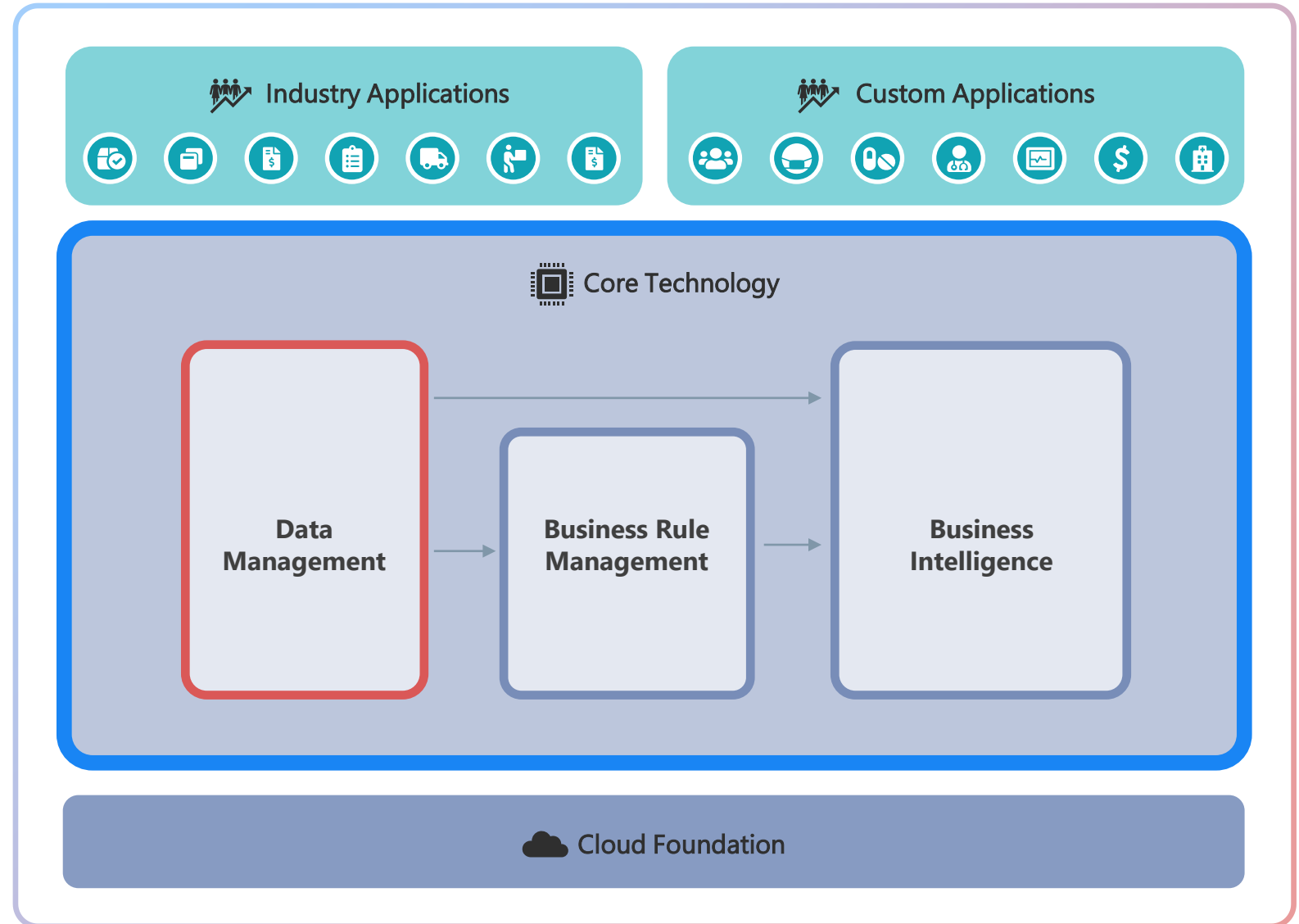
Diver Platform 7.2 – Improvements

Business Intelligence

- “My Library”
- **Quickviews improvements**

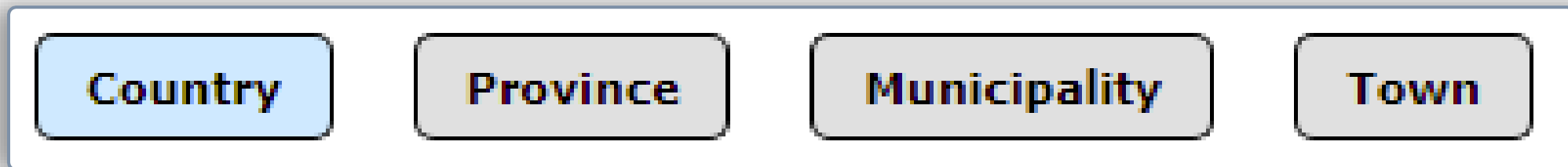
Data Management

- Spectre improvements
- DiveLine improvements
- Workbench improvements



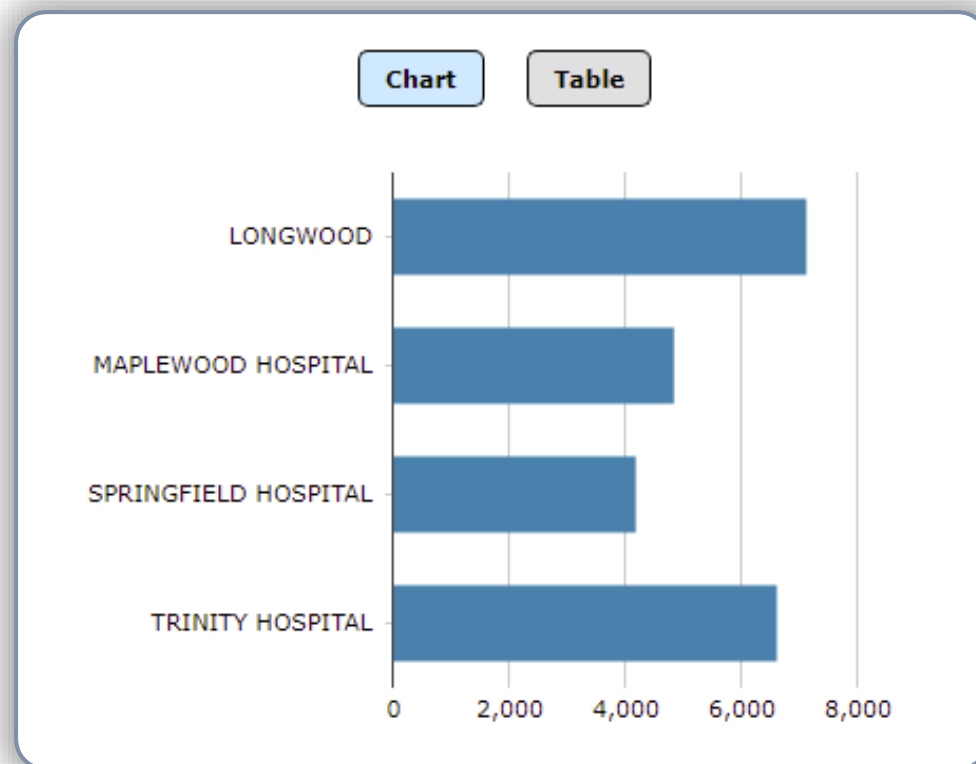
DivePort – Button-style Quickviews

- New Quickview display mode: Buttons
- Simplest possible interface
- Good for quickly showing all options to the user
- Customizable via skin properties



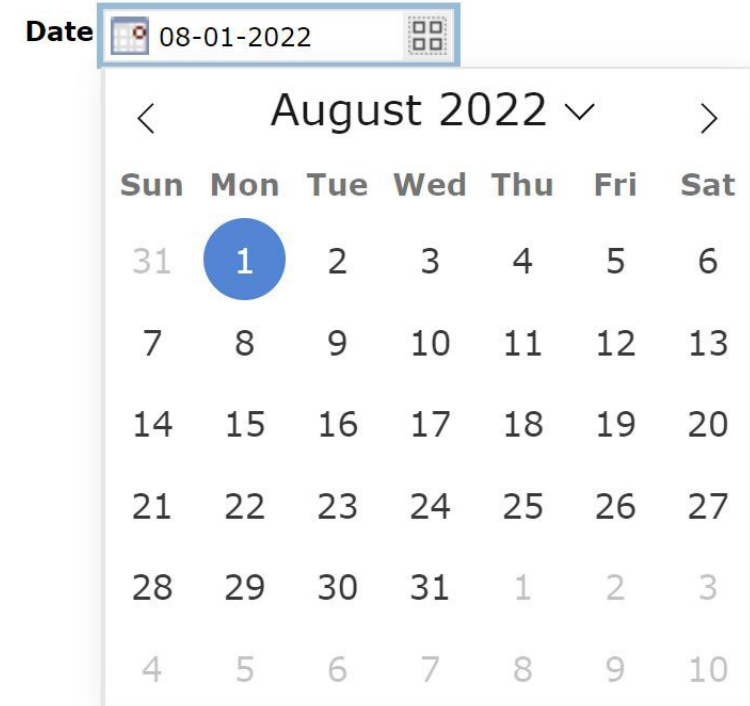
DivePort – Buttons and Stamps

Combine with QUICKVIEW_VALUE
macro and Stamp Portlets
for new interface possibilities!



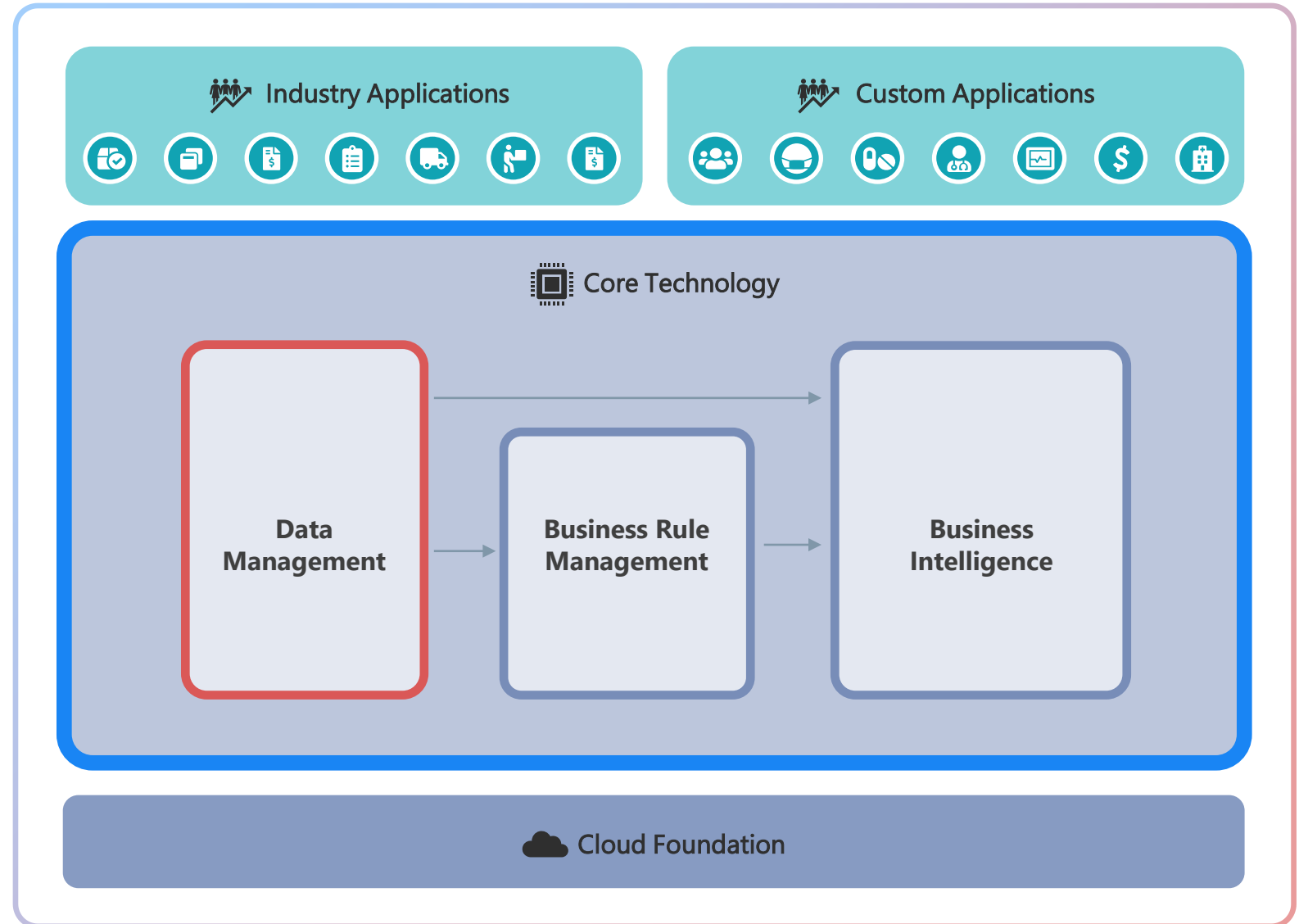
DivePort – New Calendar UI for Quickviews

- New Quickview display mode: Calendar
- Now works with cBase and Dive sources
- Single and multiple selections
- Easy navigation over multiple months or years



- “My Library”
- Quickviews improvements

- **Spectre improvements**
- DiveLine improvements
- Workbench improvements





Spectre – Faster cBase Writing

- New cBase format for 7.2 (can be read by 7.1(26) and later)
- Faster writing of cBases – by writing columns in parallel

Example*:

100,000,000 rows, 200 columns of random numbers

7.1: 1 minute

7.2: 9 seconds

(*) results may vary



Spectre – **Faster sort-natural=false**

- “Natural sort” gives special treatment to numbers in strings
- For example, sorts “x20” after “x3”
- In most cases natural sort is preferred
- If you don’t want that, set sort-natural=false
- sort-natural=false is now faster than it used to be

Example*:

100,000,000 rows, 1 column of UUIDS

7.1: 8 minutes

7.2: 2 minutes

(*) results may vary



Spectre – Unique Column Optimization

- For text-input columns where each value appears only once (e.g. ID columns)
- Set unique=true for faster builds

Example*:

100,000,000 rows, 1 column of UUIDS

7.1: 1.4 minutes

7.2: 26 seconds

(*) results may vary

Spectre – Excel Input

- Read data from XLSX files
- Automatic heuristics for picking out the right data, plus lots of options for customizing it

	A	B	C	D	E
1	Data for week ending 9/2/2022				**DRAFT**
2	Not all sites have reported in yet				
3					
4		Entry Date	Product Code	Units	Customer ID
5		29-Aug-2022	P0132	4	C1121
6			P0142	2.5	C1402
7			P0158	3	C0928
8		30-Aug-2022	P0182	9	C0991
9			P0142	3.5	C1342
10			P0101	5	C1450
11		31-Aug-2022	P0119	6	C1190

Spectre – JSON Input

- Read data from JSON files
- Useful for third-party web APIs
- Precursor to a Spectre web API input to come

```
{
  "extract_id": "10231",
  "extract_date": "2022-09-02",
  "data": [
    {
      "entry_date": "2022-08-29",
      "product": {
        "code": "P0132"
      },
      "customer": {
        "id": "C1121"
      },
      "units": 4
    },
    {
      "entry_date": "2022-08-29",
      "product": {
        "code": "P0142"
      },
      "customer": {
        "id": "C1402"
      },
      "units": 2.5
    }
  ]
}
```



Spectre – Datagen

- Generates random data
- Useful for testing and mockups
- Similar to Integrator's Datagen object
- Can generate numbers, strings, dates, cities, states, names

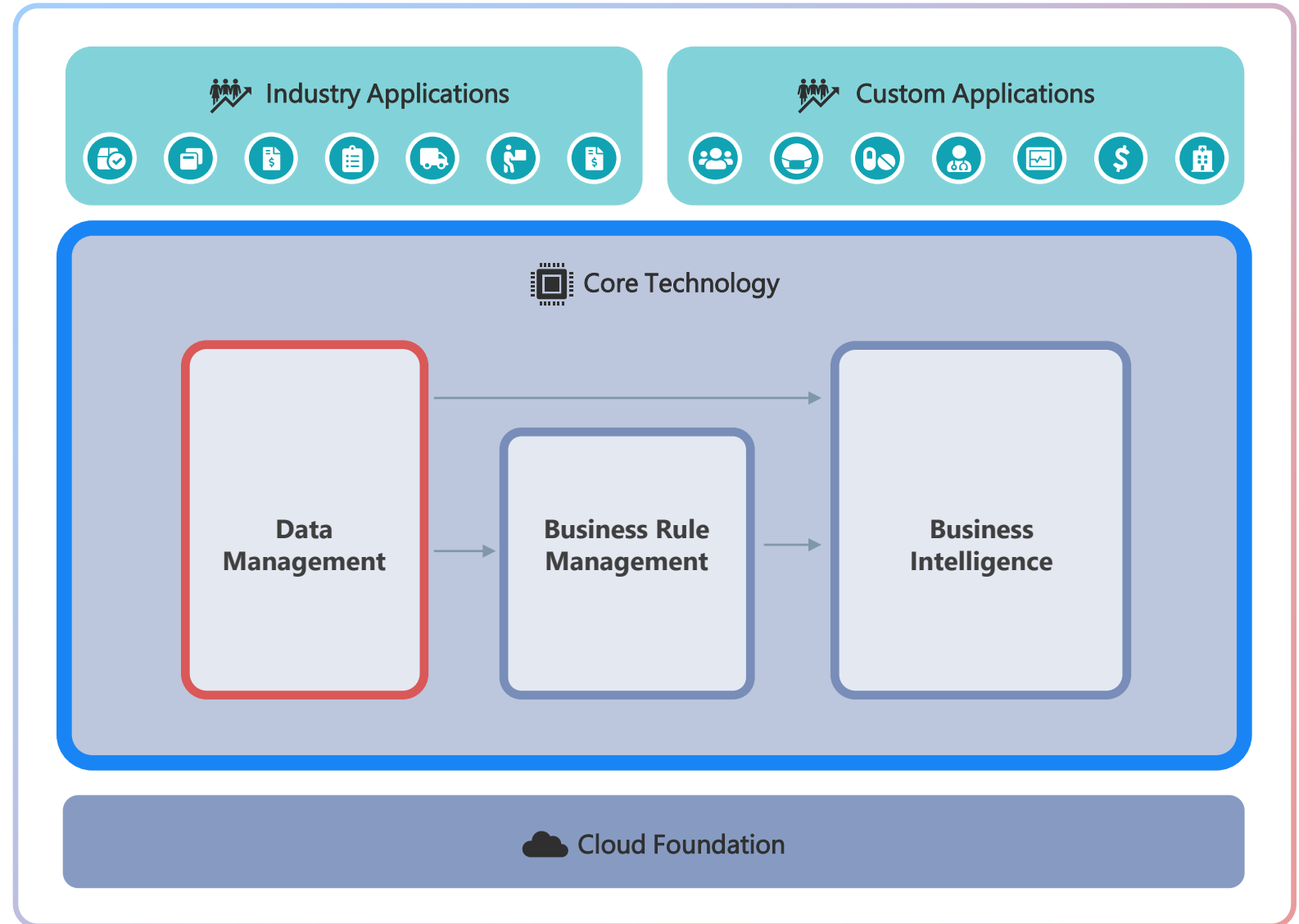
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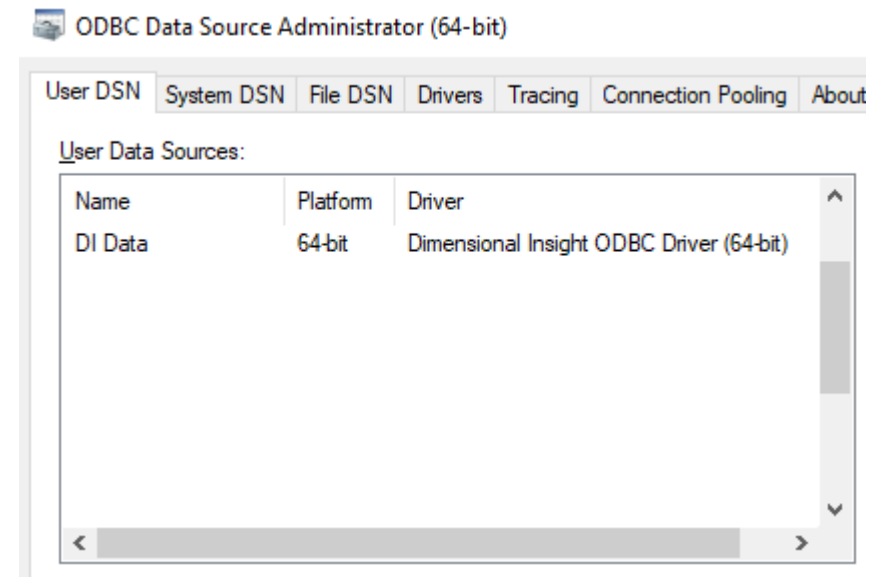
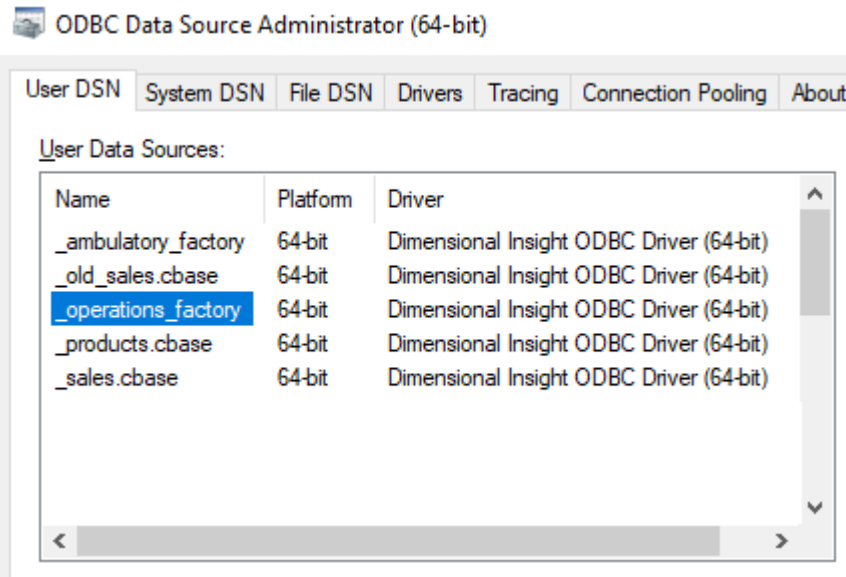
Data Management

- Spectre improvements
- **DiveLine improvements**
- Workbench improvements



DiveLine: ODBC Registry

- Previously, DI-ODBC connected to one data source at a time (cBase, cPlan, Measure Factory)
- Now you can register many data sources in DiveLine
- Use a single DI-ODBC connection to reach any of them





DiveLine: ODBC Registry

- Configure using dicfg or the odbc-registry.txt file (for now)

Catalog	Schema	Table	Project	Path
master	public	my_sales	Sales	/cplans/sales.cplan
master	public	factory	mf_hospital	/factory-output
master	public	product_table	Sales	/cbases/products.cbase



Web API (coming soon)

- New web API for querying data from DI services
- Built in to DivePort
- Query your existing cPlans, cBases, and Measure Factory
- Standard REST API style



Web API (coming soon)

Features:

- List DiveLine projects, browse project files
- Get metadata for data sources (cBase, cPlan, Dive script, Factory)
- Query data sources (using dimensions, summaries, filter, sort, pass parameters)
- Get data in JSON or tab-delimited text

Futures:

- Run production scripts



DiveLine: Access tokens

- But it's not good practice to store passwords in DSNs and scripts
- ODBC, Web API, Dial, or third-party
- Access tokens are a safer alternative
- Create single-purpose, revocable, strong tokens
- They can expire
- Limited capability

Diver Platform 7.2 – Improvements

Business Intelligence

- “My Library”
- Quickviews improvements

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- Spectre improvements
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- **Workbench improvements**

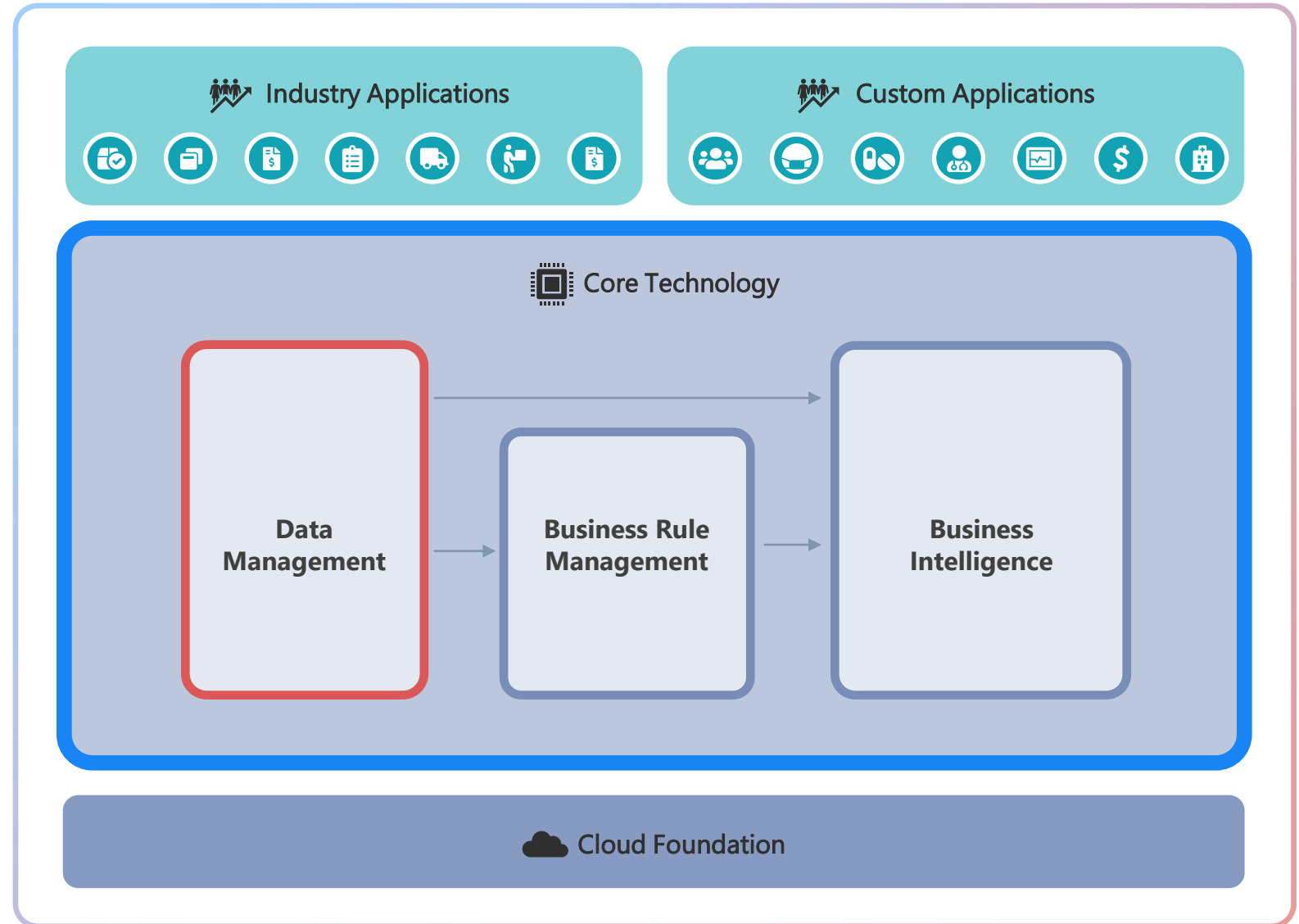
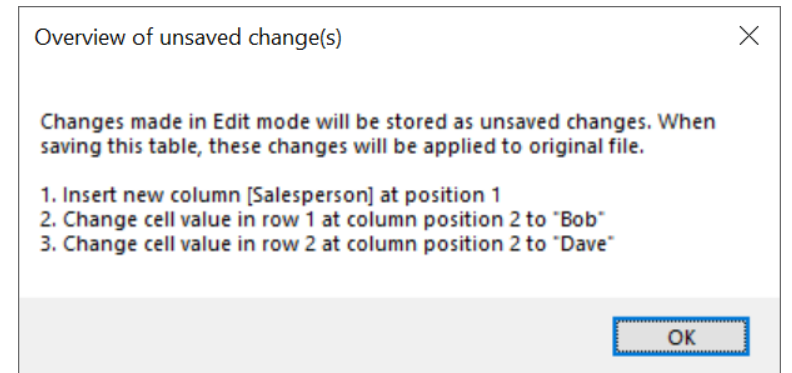
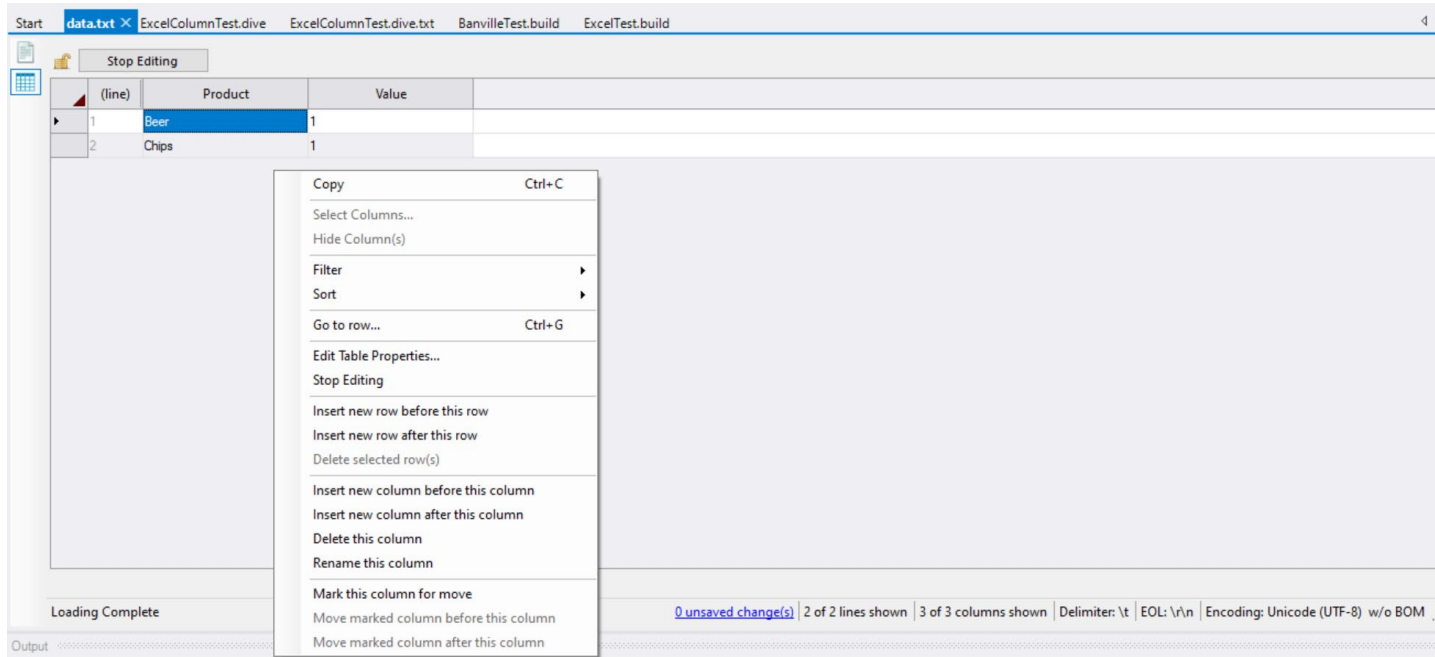


Table Editor

- Add/Remove/Rename/Reorder Columns
- View Pending Operations



Spectre Excel Input Editor

The screenshot displays the Spectre Excel Input Editor interface. At the top, a workflow diagram shows an 'excel' component (labeled 'data.xlsx') connected to an 'output' component (labeled 'output_2'). Below this, the 'data.xlsx' component is selected, revealing its configuration options.

Excel Options

- Include Other Columns: False
- Excel File Path: /data.xlsx
- Headers: True
- Limit Rows:
- Password:

Columns (2)

Column	Type	Keep	Remove	Alias
Product	string	☒	☐	
Quantity	integer	☒	☐	

Comments

```
// Read a tab-delimited input file like this:  
// For comma-delimited files, use this instead:  
// text-input "my-input.csv" delimiter=","  
// Specify the types for columns here, for example:  
// column "my-string" type="string"
```

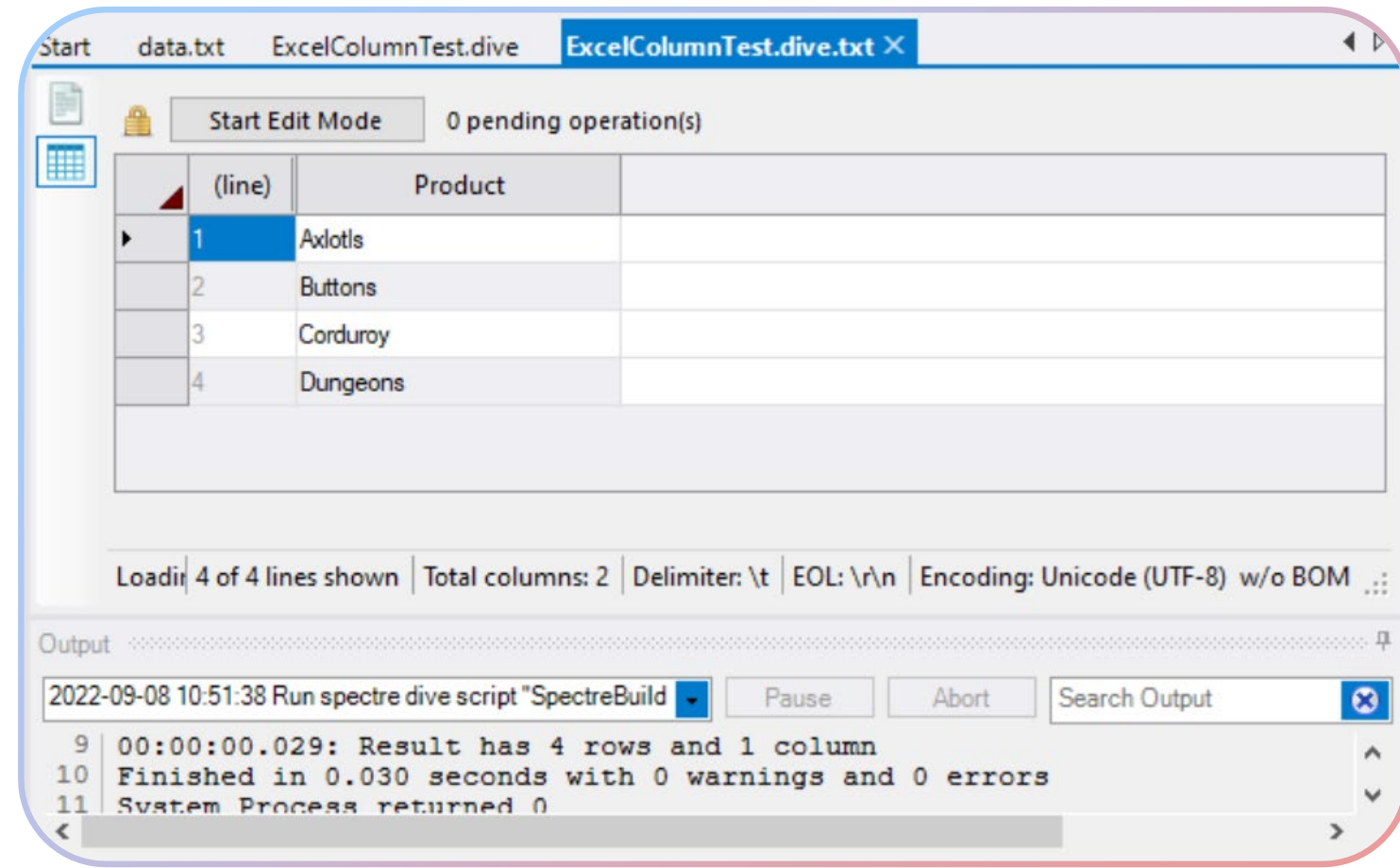
Properties

- Period Type:
- Repeat if Blank: True
- Required Dimension:
- Sort By:

Column Properties

Dive "Editor"

- Dives output to temp text files
- Open in Table Editor
- Results are available for reuse



Go To Tab Dialog

- Filter Tabs by:
 - Filename
 - Project
 - Type (int, etc.)
- Optimized for keyboard
(No mouse needed!)

Tab Finder

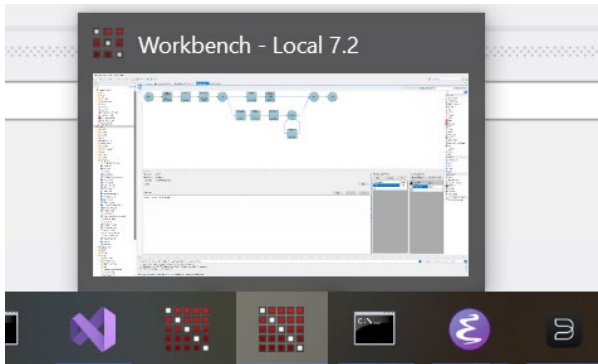
Filter Project Type

| All Projects All File Types

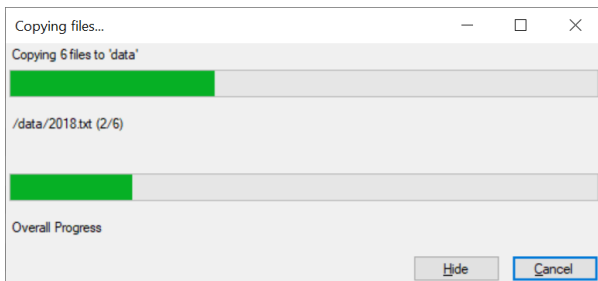
TabName	Project	Path
Start		
data.txt	SpectreBuildTest	/data.txt
ExcelColumnTest.dive	SpectreBuildTest	/ExcelColumnTest.dive
ExcelColumnTest.dive.txt	SpectreBuildTest	/temp/dive_results/ExcelColumnTest.dive.txt
buildall.prd	races	/programs/buildall.prd
races Settings	races	

Cancel OK

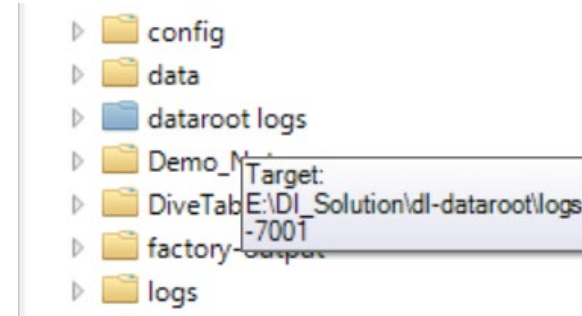
Minor Quality of Life Improvements



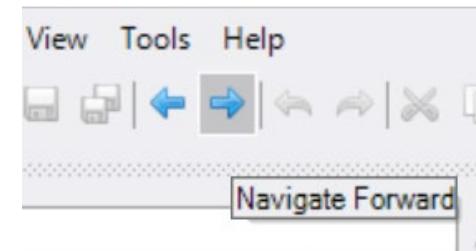
- Connection name in Taskbar



- Multiple-Bar Progress Dialogs



- Hover over Aliases to see their targets



- Navigation buttons



Markdown Editor

- Live Demo!

7.2

- My Library
 - New Interface
 - Menu Portlet “Gallery” mode
 - Shortcuts, Shared Shortcuts
 - Simpler Self Service
- DivePort
 - Button-style Quickviews
 - New Calendar UI
 - Web API
- Spectre
 - Faster cBase writing
 - Faster sort-natural=false
 - Unique column optimization
 - json-input
 - excel-input
- DiveLine
 - Access Tokens
 - ODBC Registry
- Workbench
 - Table Editor improvements
 - Markdown Editor
- And more!



7.2 – When Can I have it?

- 7.2 (2) is out now



7.2 – What About Migration?

- Spectre 7.1(26) and later can read the new 7.2 cBases
- My Library and Shortcuts are opt-in
- You will likely want to reorganize pages when switching to My Library
- Most DivePort Portlets are the same