Make your SVG's come to life

Alan Arentsen

Database Consultancy

Database Consultancy

JS

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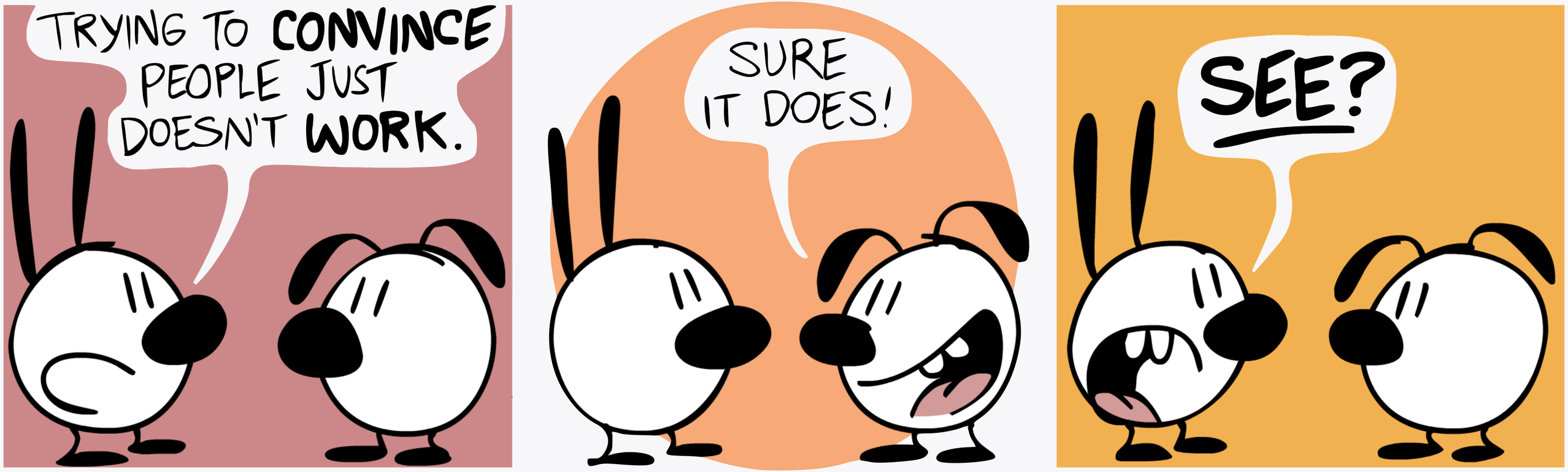
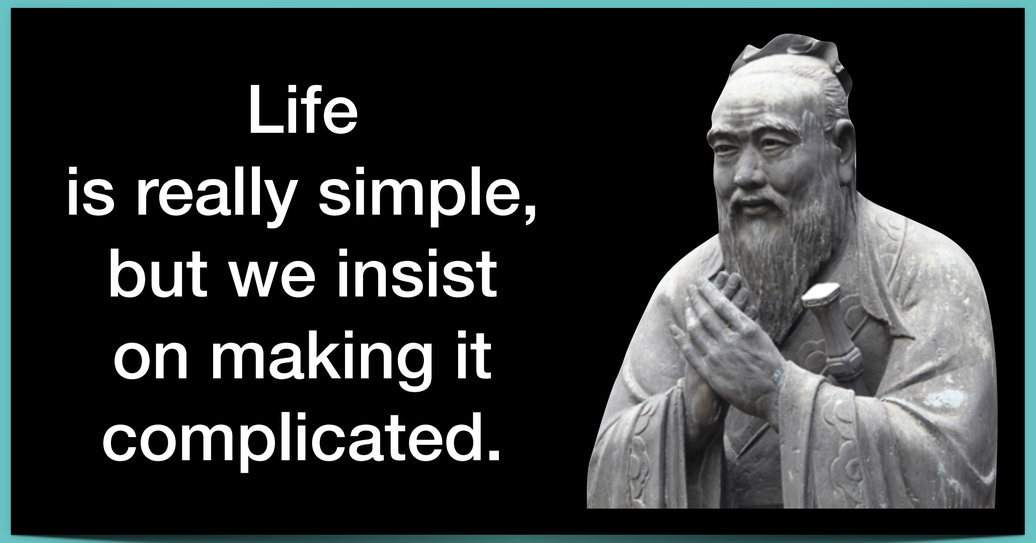

TRYING TO CONVINCE PEOPLE JUST DOESN'T WORK.
SURE IT DOES!
SEE?

Background


Life
is really simple,
but we insist
on making it
complicated.

Tasks

	Milestone	Assignee	Name	Description	Start Date	End Date	Is Complete	Created	Created By	Updated	Updated By
		Tyson King	Identify Server Requirements	Determine which databases will be used to install Web development tool for Development, QA, and Production. Also specify which Web Listeners will be used for the three envi	26-OCT-	27-OCT-	Yes	11/26/2019	ADBC	11/26/2019	ADBC
		Mei Yu	Install Web development tool	Install the l the vendor Production developme only.							ADBC
		Harold Youngblood	Configure Web Listeners	Configure t tool to sup							ADBC
		Bernard Jackman	Configure Web development tool Instance Administration Settings	Set the app for the dev set instanc available A							ADBC
		Mei Yu	Define Workspaces	Define wor developme granted to created as and import							ADBC
		Harold Youngblood	Assign Workspace Administrators	In development assign a minimum of two Workspace administators to each workspace. These administrators will then be responsible for maintaining developer access within their own workspaces.	30-OCT-19	30-OCT-19	No	11/26/2019	ADBC	11/26/2019	ADBC

1 - 6

Task

Assignee: Tyson King

Name *: Identify Server Requirements

Description: Determine which databases will be used to install Web development tool for Development, QA, and Production.
Also specify which Web Listeners will be used for the three environments.

Start Date *: 26-OCT-19

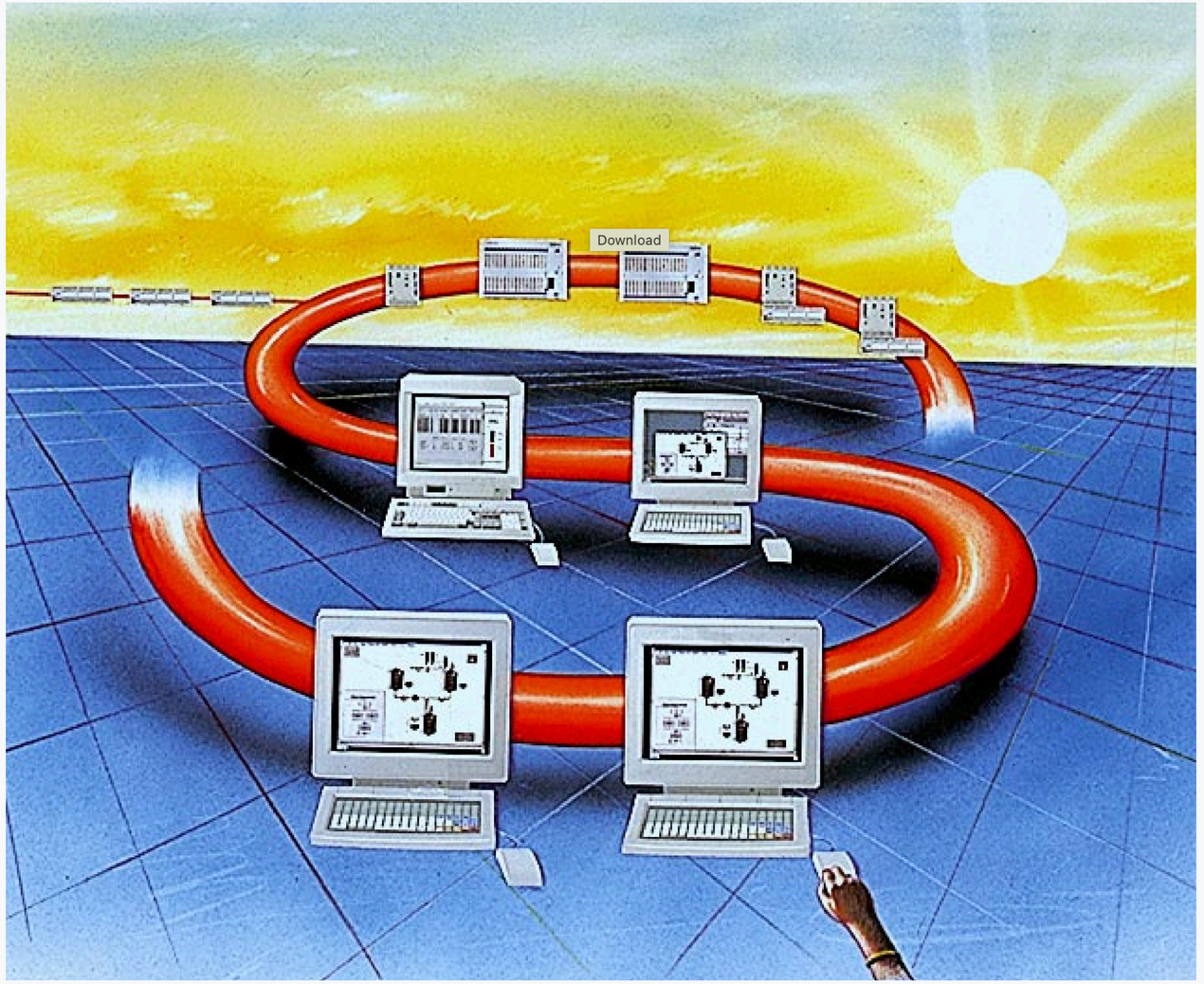
End Date *: 27-OCT-19

Is Complete: Yes | No

Cancel | Delete | Apply Changes

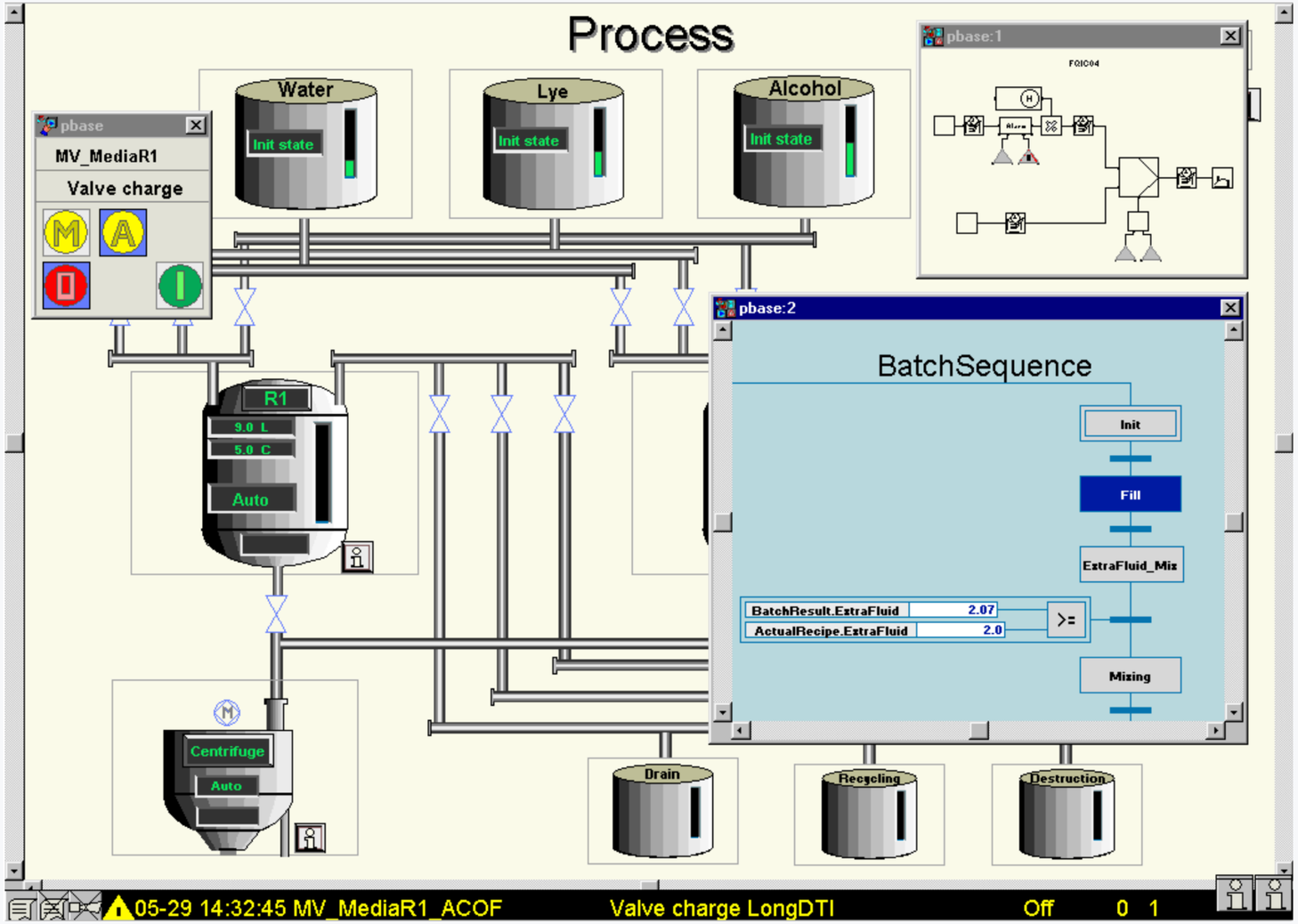
SattLine

Object-oriented Process Automation



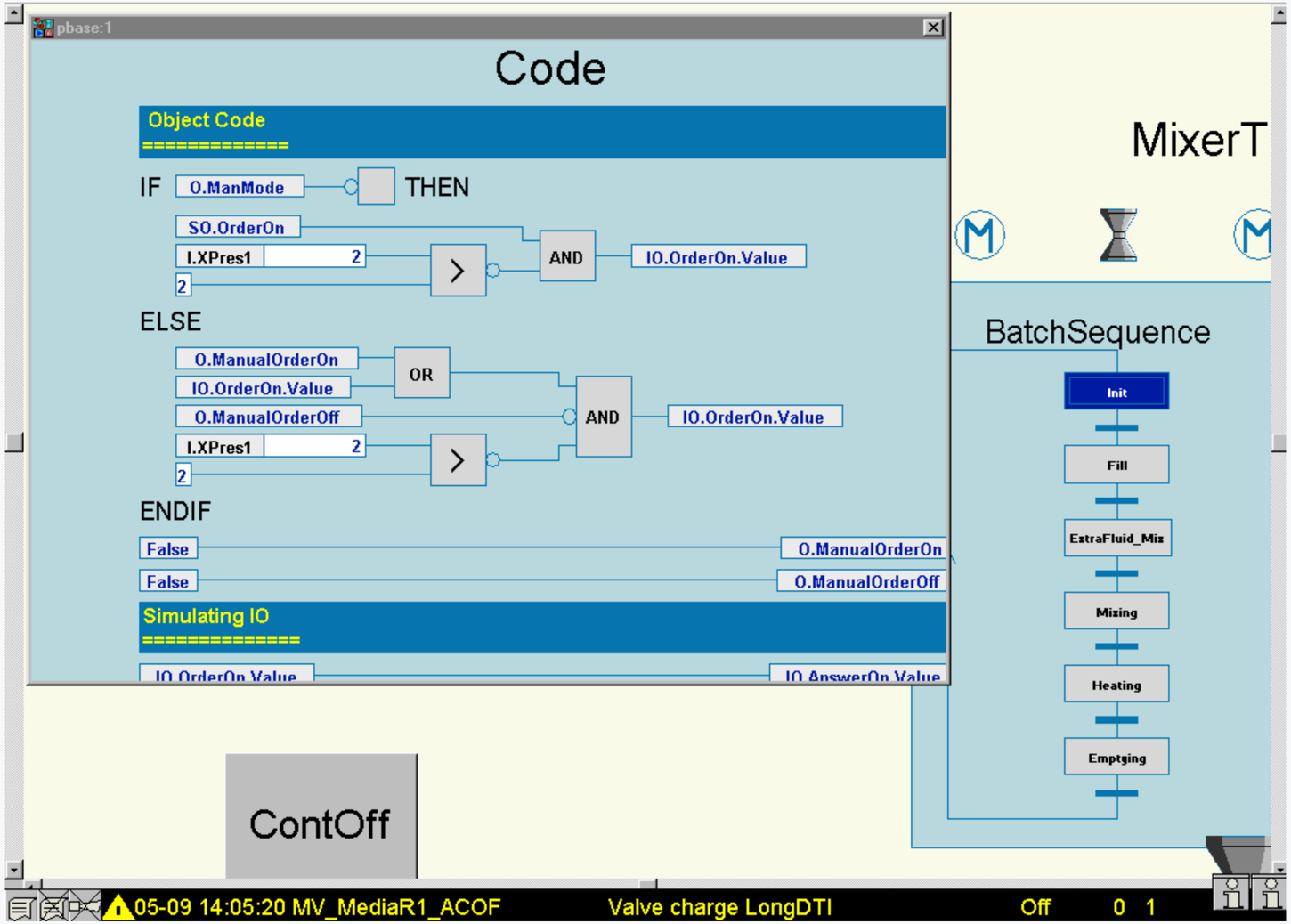
SattLine

Object-oriented Process Automation



SattLine

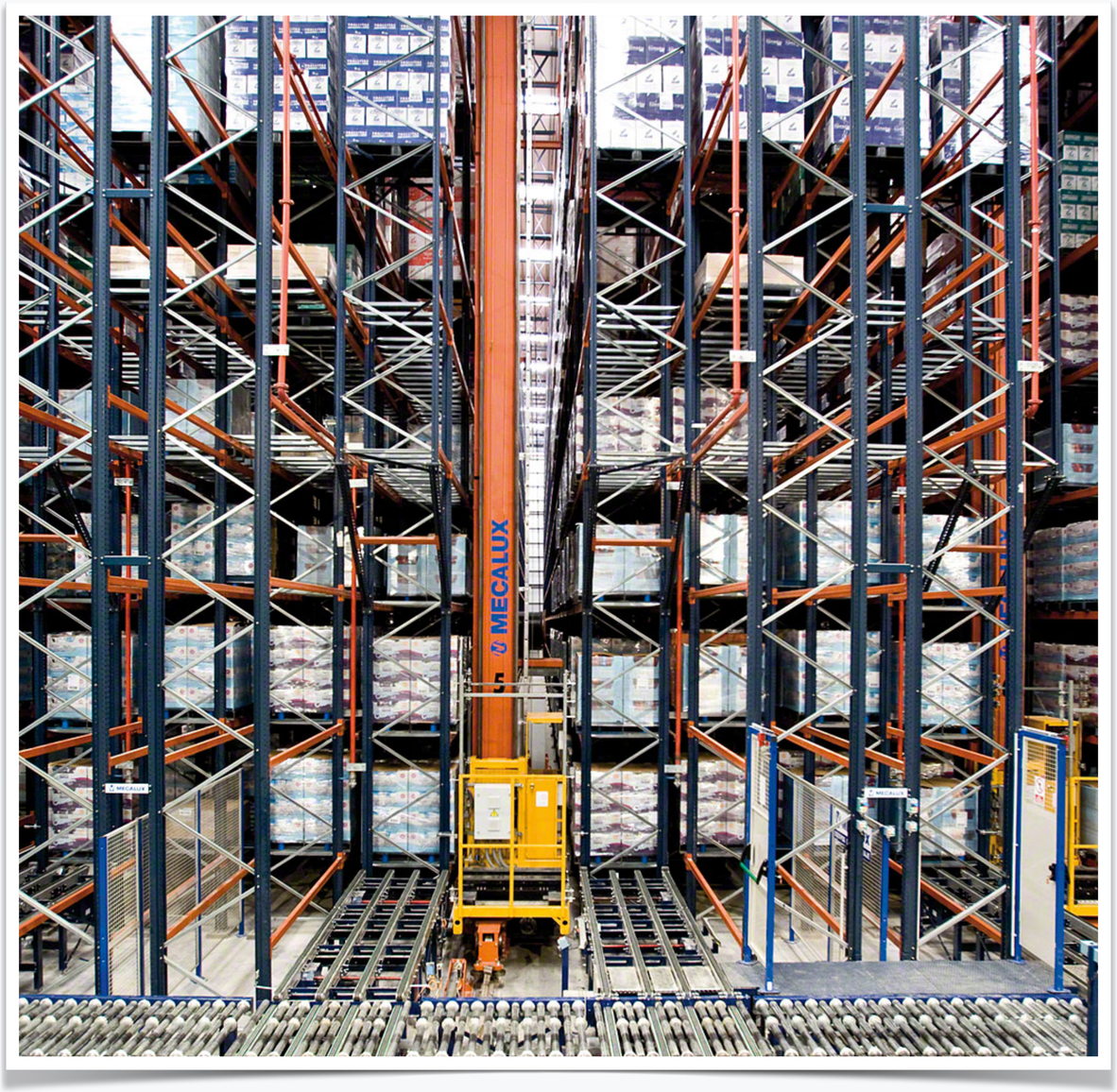
Object-oriented Process Automation



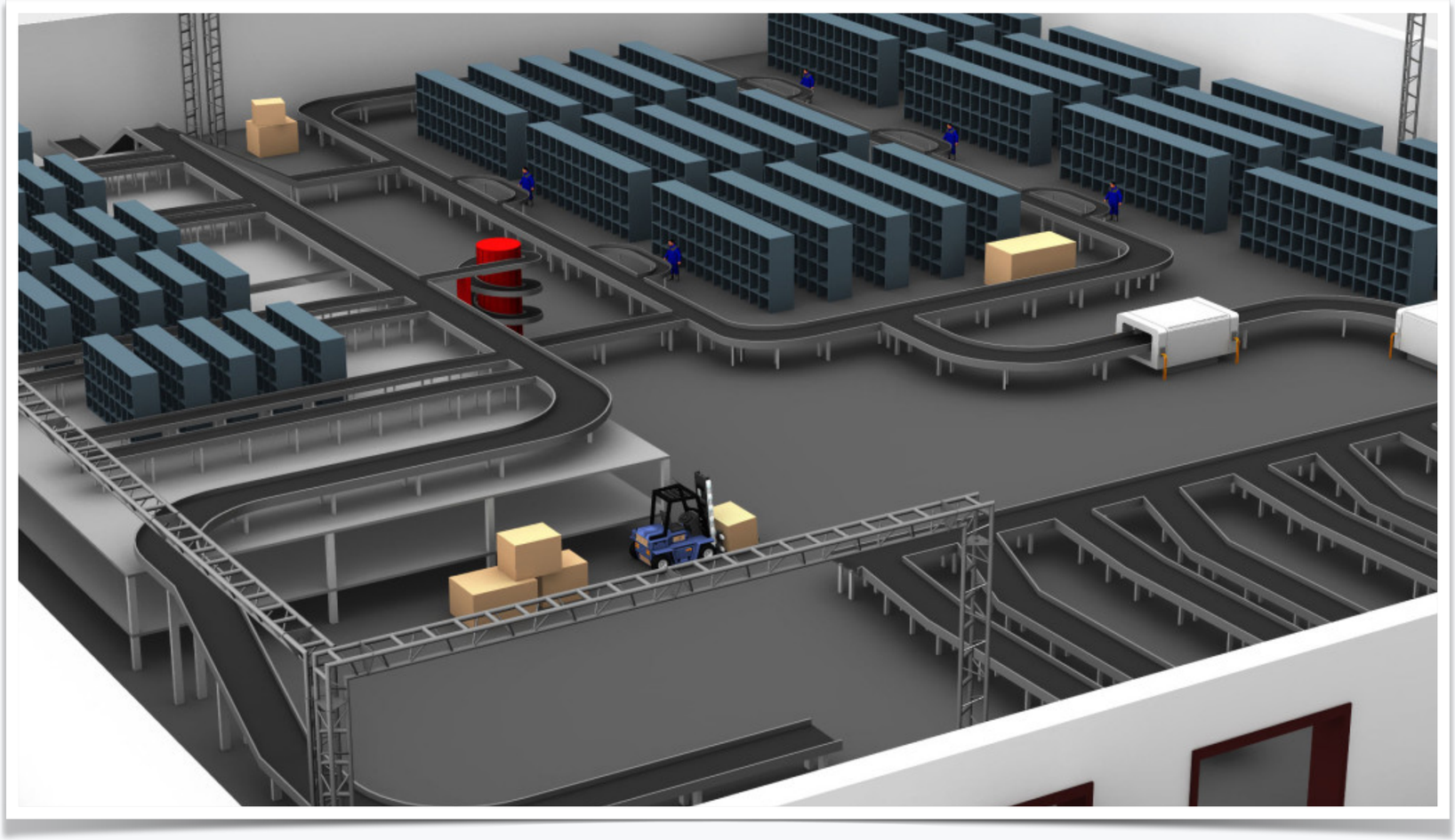
Warehouse

Warehouse

Warehouse



The Assignment



The Assignment

Where is my pallet?

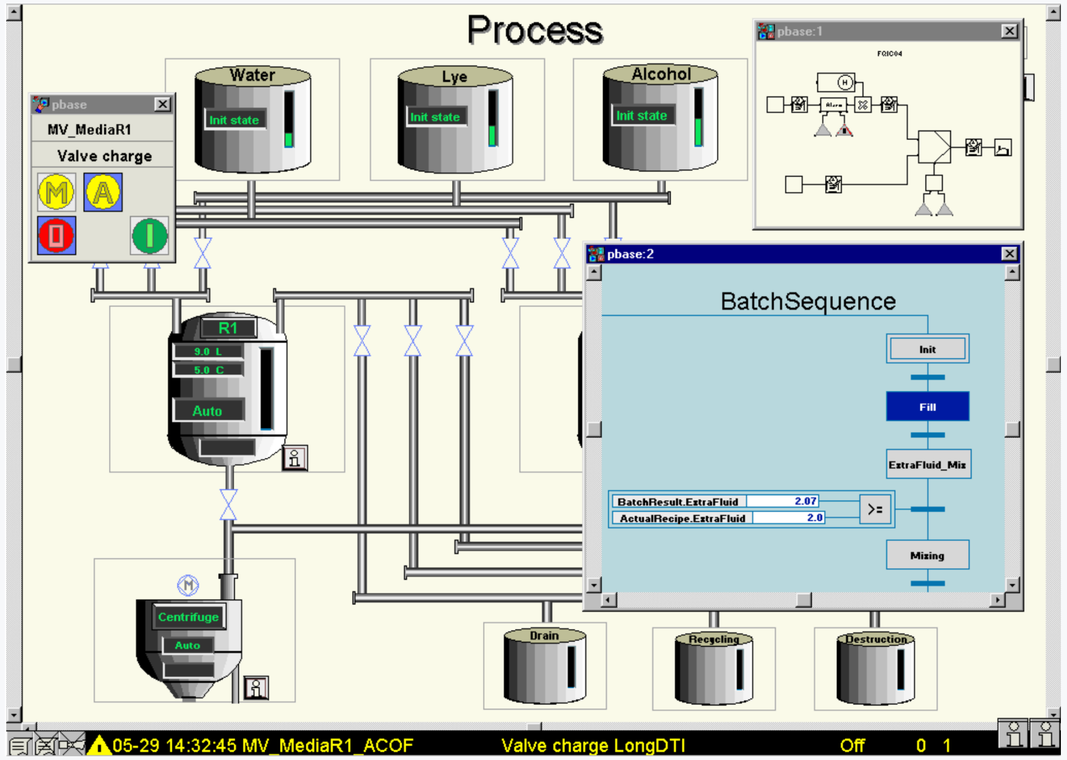
What is the status of the crane / conveyor?

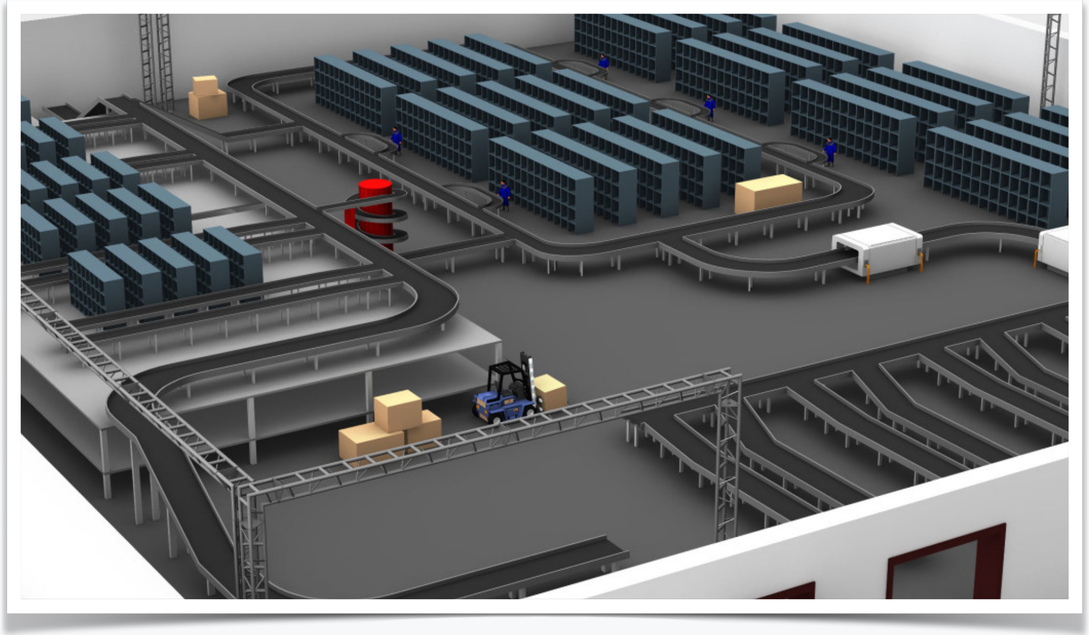
Is there something in errors in the warehouse?

The Assignment

and some more specifications ...

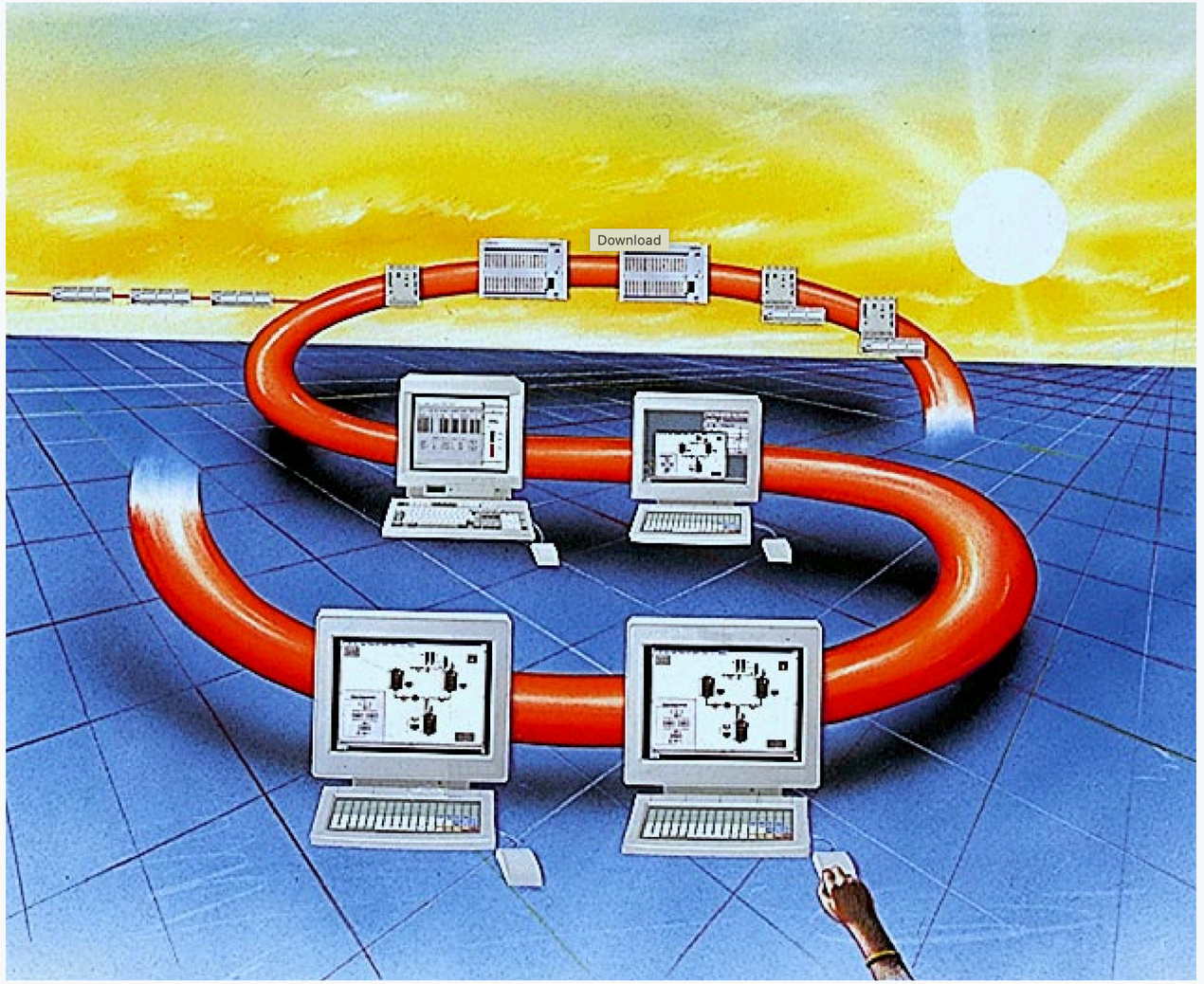
The Assignment



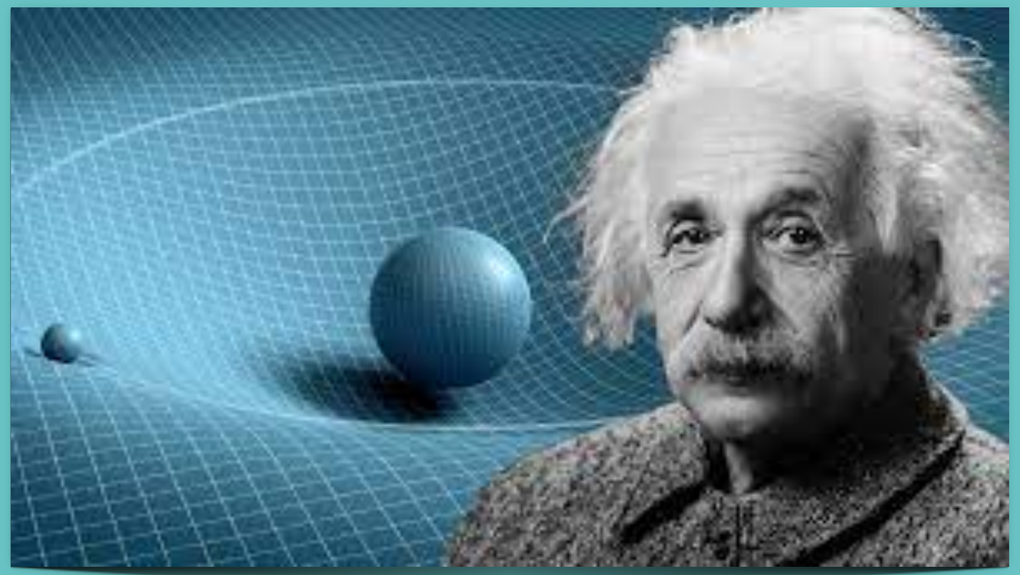


SattLine

Object-oriented Process Automation



The Solution



What did I need?

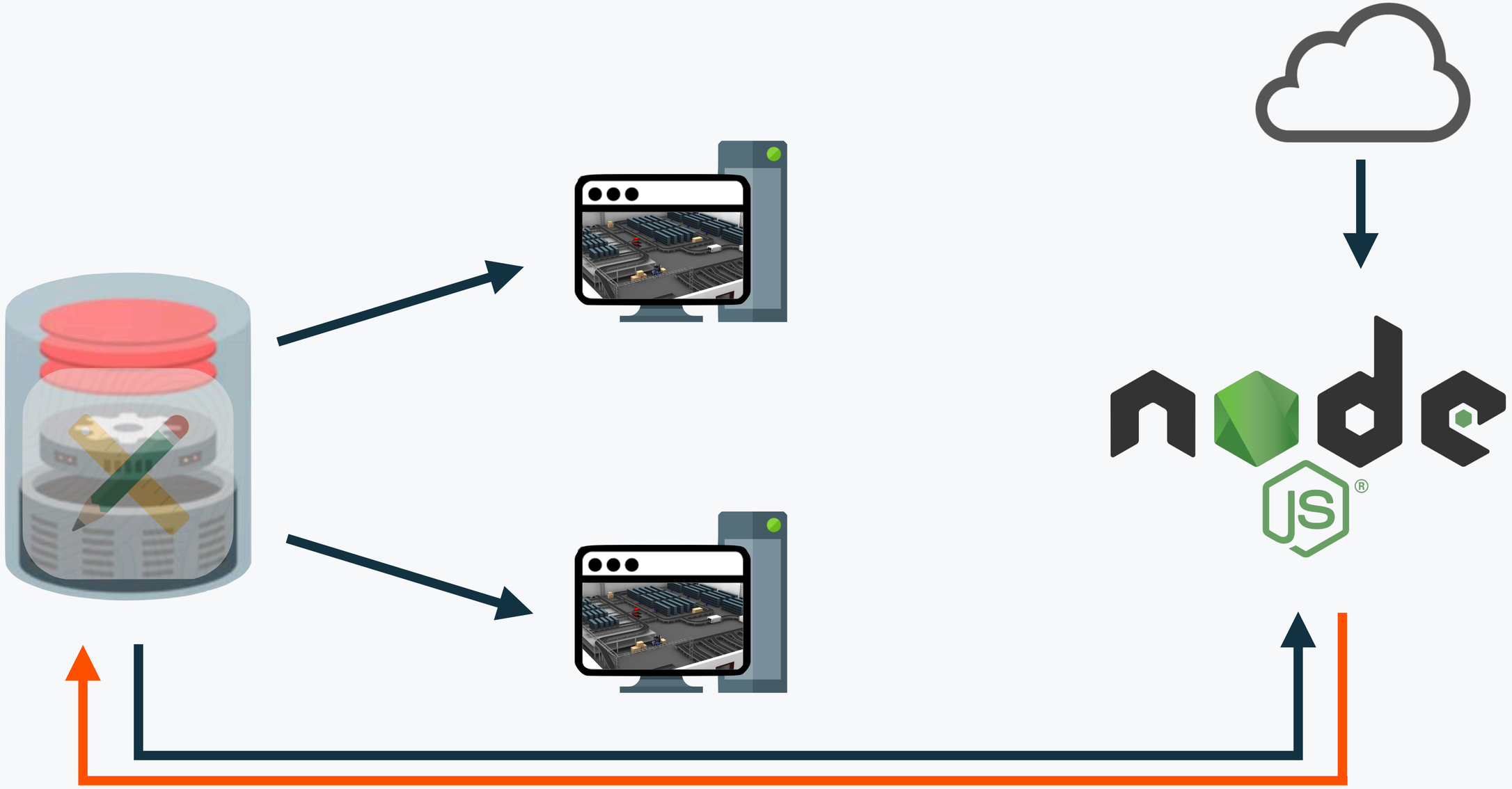
Integration with APEX

(different presentation)

APEX

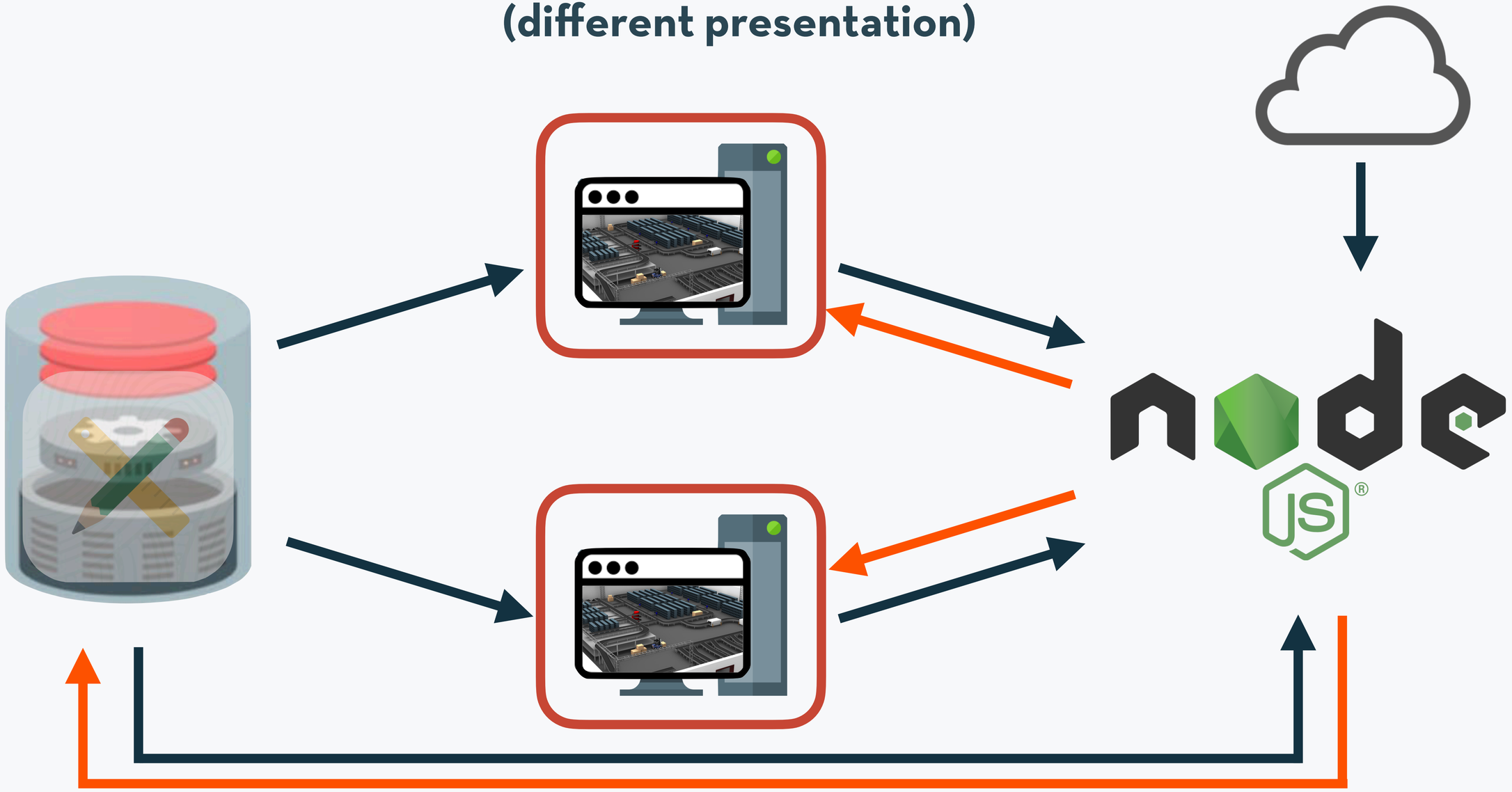
WebComponents

Information Flow

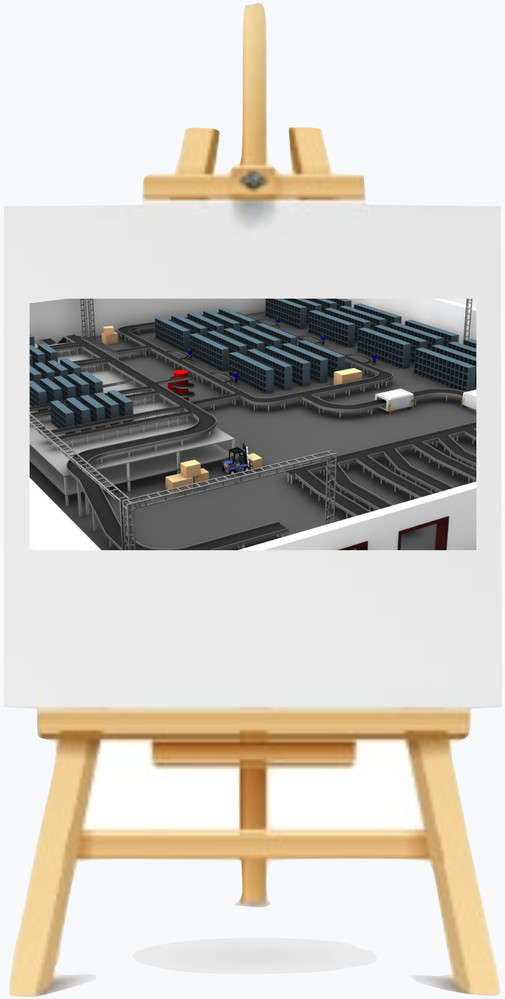


Information Flow

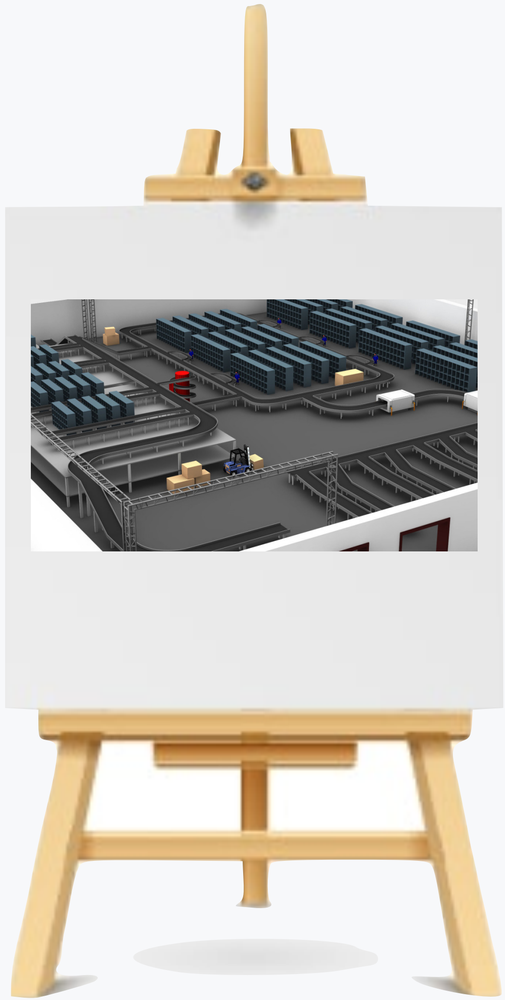
(different presentation)

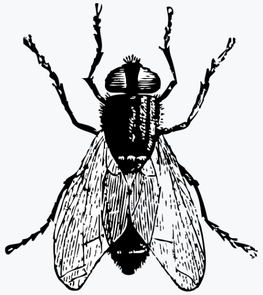


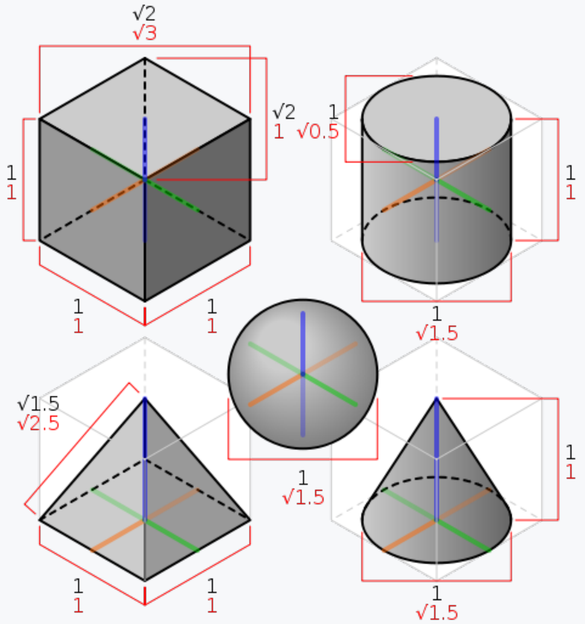
Canvas



Canvas







What is an SVG

“SVG: Scalable Vector Graphics”

“Scalable Vector Graphics (SVG) are an XML-based markup language for describing two-dimensional based vector graphics.”

text-based

standard for describing **images**

can be rendered at **any size**

designed to work with other standards like

CSS, DOM, JavaScript

graphics


SVG

≠


HTML

≠

SVG has it's own set of elements

```
<g>
    <circle/>
</g>
```

≠

SVG elements have their own attributes

```
<g id="redCircle">
    <circle cx="250" cy="180" r="30" stroke="pink" stroke-width="2"/>
</g>
```

≠

Some attributes can be set with CSS

```
<g id="redCircle">
    <circle cx="250" cy="180" r="30" stroke="pink" stroke-width="2"/>
</g>
```

```
#redCircle {
    fill: red;
}
```


SVG

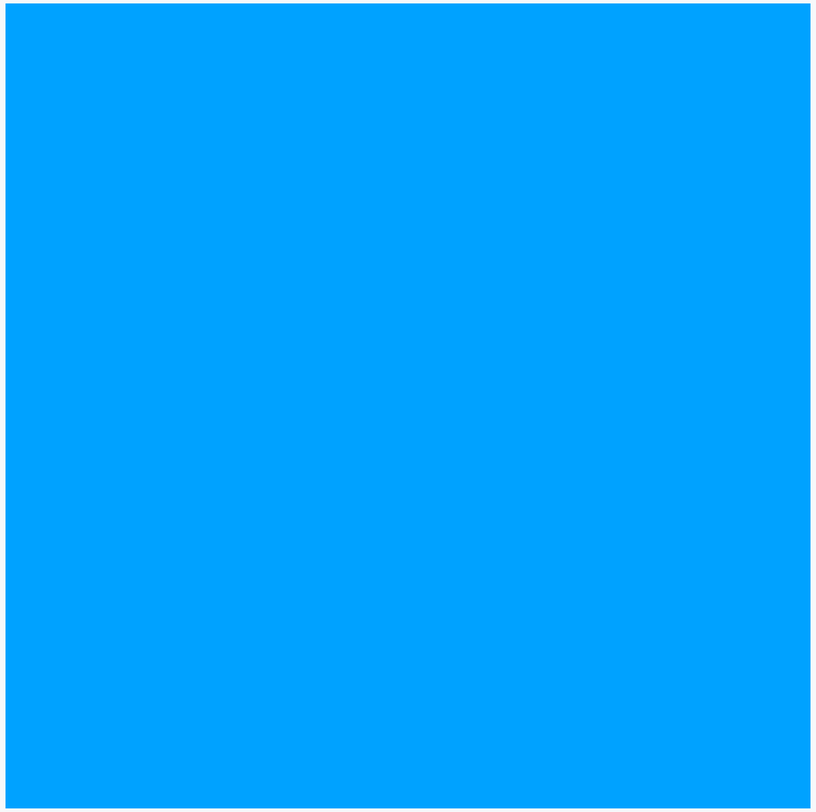
≠


3D


SVG

≠


3D




SVG
≠
3D
3D

Plywood is the element we use to create Pinocchio

```
<g>
    <path/>
</g>
```

In SVG we can describe plywood as a path

We give Pinocchio a facial expression by painting him

Geppetto,
the master of
‘old style’ SVG.

```
<g>
    <path fill="#DEC29D"/>
</g>
```

In SVG we can use the fill attribute

Interaction with SVG

The Assignment

Where is my pallet?

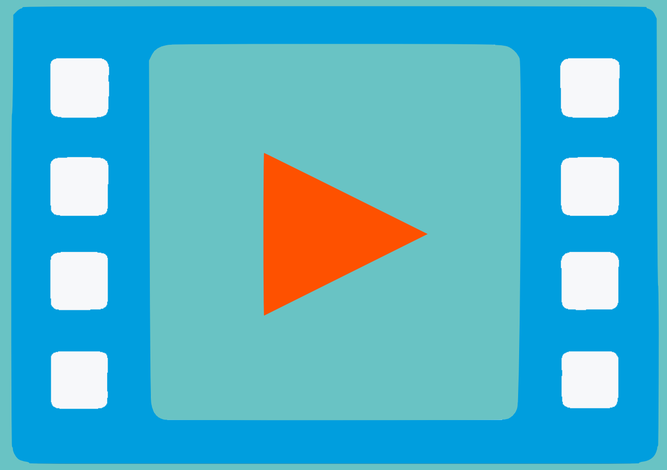
What is the status of the crane / conveyor?

Is there something in errors in the warehouse?

Is this possible?

Yes, of course!

Animations



SVG element

Animate an attribute of an element over time


```
<animate attributeName="opacity"
  from="1" to="0"
  dur="1.5s" begin="0s"
  repeatCount="indefinite" />
```

CSS


```
@keyframes my_animation_selector {
    0%  {
        transform: scaleY(1)
    }

    25% {
        transform: scaleY(0.3)
    }

    50% {
        transform: scaleY(0.7)
    }

    75% {
        transform: scaleY(0.15)
    }
}
```

Snap.svg

```
element.animate({
   transform: "t0,-280"
}, 1000, mina.elastic);
```

Anime.js


```
anime({
    targets: '#P8_LOGO',
    translateX: path('x'),
    translateY: path(‘y'),
    easing: 'linear',
    duration: 5000,
    loop: true
});
```

Reusability

(and grouping)


PASSOÃ
PASSOÃ
THE PASSION DRINK
MADE WITH
PASSIÕN FRUIT JUICE
FROM BRAZIL
e70 CL
LIQUEUR
PRODUCT OF FRANCE
17% VOL

Grouping

Grouping

```
<path fill="#fca430" stroke="none" d="M 378.024994 124.136993 C…" />
<path fill="#ffde55" stroke="none" d="M 355.755005 124.136993 C…" />
<path fill="#f75959" stroke="none" d="M 233.776993 235.059006 L…" />
<path fill="#f48e8e" stroke="none" d="M 216.436996 172.389008 L…" />
```

Grouping

```
<g id="orange">
 <path fill="#fca430" stroke="none" d="M 378.024994 124.136993 C…" />
 <path fill="#ffde55" stroke="none" d="M 355.755005 124.136993 C…" />
</g>

<g id="straw">
 <path fill="#f75959" stroke="none" d="M 233.776993 235.059006 L…" />
 <path fill="#f48e8e" stroke="none" d="M 216.436996 172.389008 L…" />
</g>
```

the <defs> element

the <defs> element

```
<defs>
   <linearGradient id="passoa-jus" gradientTransform="rotate(90)">
     <stop offset="20%" stop-color="gold" />
     <stop offset="90%" stop-color="red" />
   </linearGradient>
</defs>
```

the <defs> element

```
<g id="glass-content">
   <path id="path666" fill="url('#passoa-jus')" stroke="none"
     d="M 157.593002 172.389008 L 176.289993 410.729004 C 177.487 425.992004
     190.222 437.765991 205.531006 437.765991 L 249.207993 437.765991 C
     264.516998 437.765991 277.252014 425.991028 278.449005 410.729004 L
     297.145996 172.389008 L 157.593002 172.389008" />
</g>
```

the <symbol> element

the <symbol> element

```
<defs>
   <circle id="bubble" fill="#f48e8e" stroke="none" cx="1" cy="1" r="1" />
</defs>
```

the <symbol> element

```
<symbol id="bubble" width="1" height="1" viewBox="0 0 2 2">
   <circle fill="#148e8e" stroke="none" cx="1" cy="1" r="1" />
</symbol>
```

the <symbol> element

```
<g id="bubbles">
  <use href="#bubble" x="176" y="233" width="22" height="22" />
  <use href="#bubble" x="241" y="208" width="36" height="36" />
  <use href="#bubble" x="206" y="283" width="34" height="34" />
  <use href="#bubble" x="183" y="322" width="20" height="20" />
  <use href="#bubble" x="251" y="347" width="20" height="20" />
  <use href="#bubble" x="200" y="392" width="21" height="21" />
</g>
```

SVG's are easy!

powerful

lightweight
(can be)

flexible

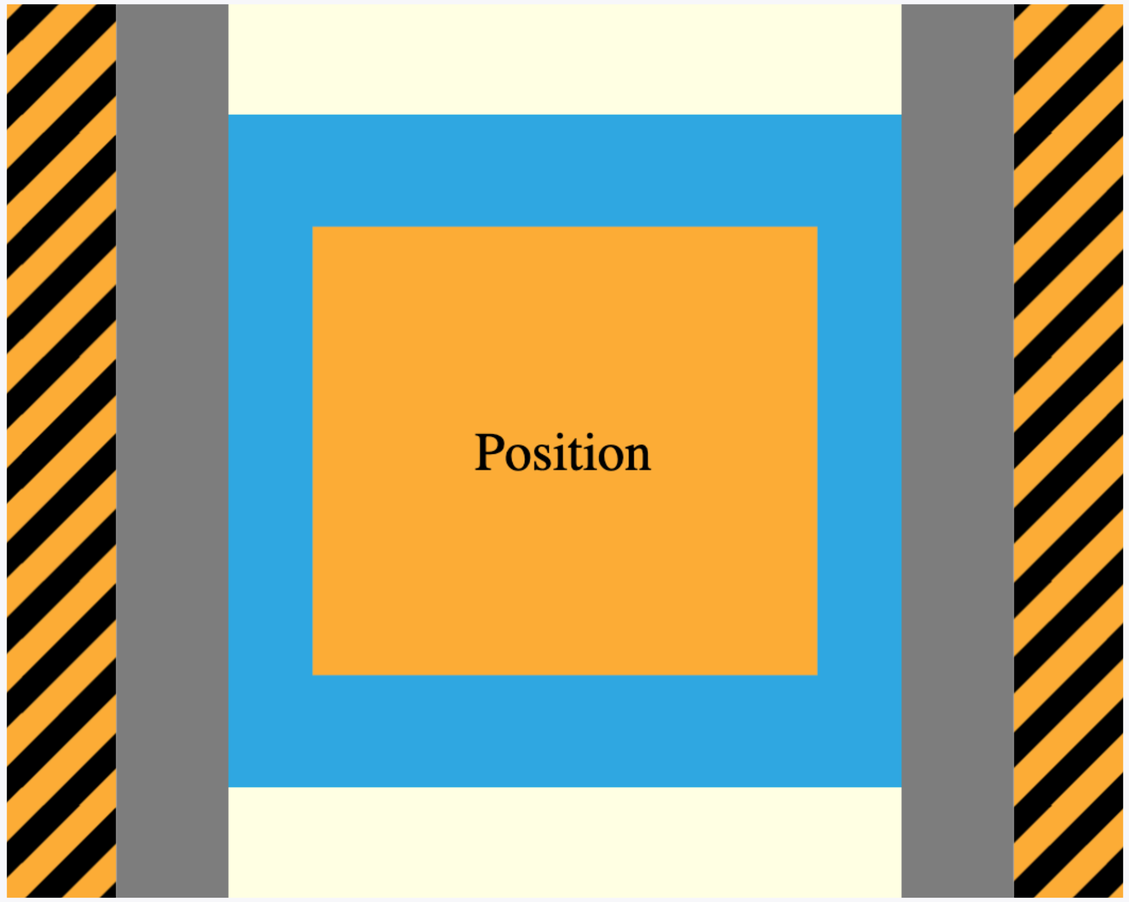
Figma

Pixelmator
Pro

Adobe
Illustrator

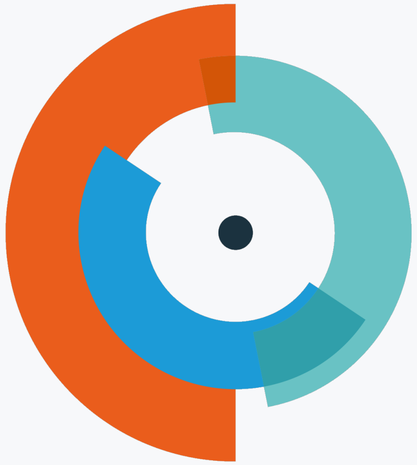
Conveyor

Conveyor



Demo App

https://apex.adbc.dev/ords/r/adbc/svg-s-in-apex



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