

<svg>

Wat ken je ermee?

Hallo, Linux Nijmegen!

JORIS ZWART

Scalable Vector Graphics



SVG's tekenen

Inkscape, AI

Maar schept dat plezier?

In deze presentatie:

1. DHZ mét code
2. Over SVG
3. DHZ via code
4. Tips & instinkers

Deel I

Doe het zelf mét code

Opfriscursus HTML & XML

Text editor: linux-nijmegen.html

```
<h1>
```

```
    Linux Nijmegen
```

```
</h1>
```

```
<p>
```

```
    Linux user group
```

```
</p>
```

Browser: `file:///linux-nijmegen.html`

Linux Nijmegen

Linux user group

Doe je mee?

Ingrediënten

1 Teksteditor

1 Internetbrowser

1 Portie geduld

Text editor: svg-met-code.html

```
<svg viewBox="-100 -50 200 100">
```

```
  <!-- je code hier -->
```

```
</svg>
```

Daar gaan we!



```
<circle r="10"/>
```

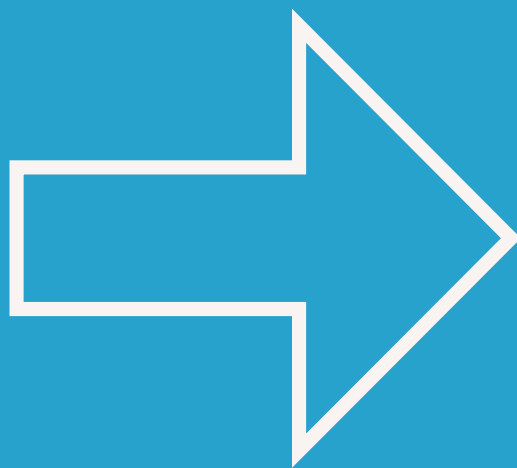
Grafische primitieven











We ♥ Linux Nijmegen

Kleur!



Stroke & fill



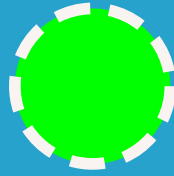
```
<circle  
  r="10"  
  fill="lime"  
>
```



```
<circle  
  r="10"  
  fill="lime"  
  stroke="#f9f4f2"  
>
```



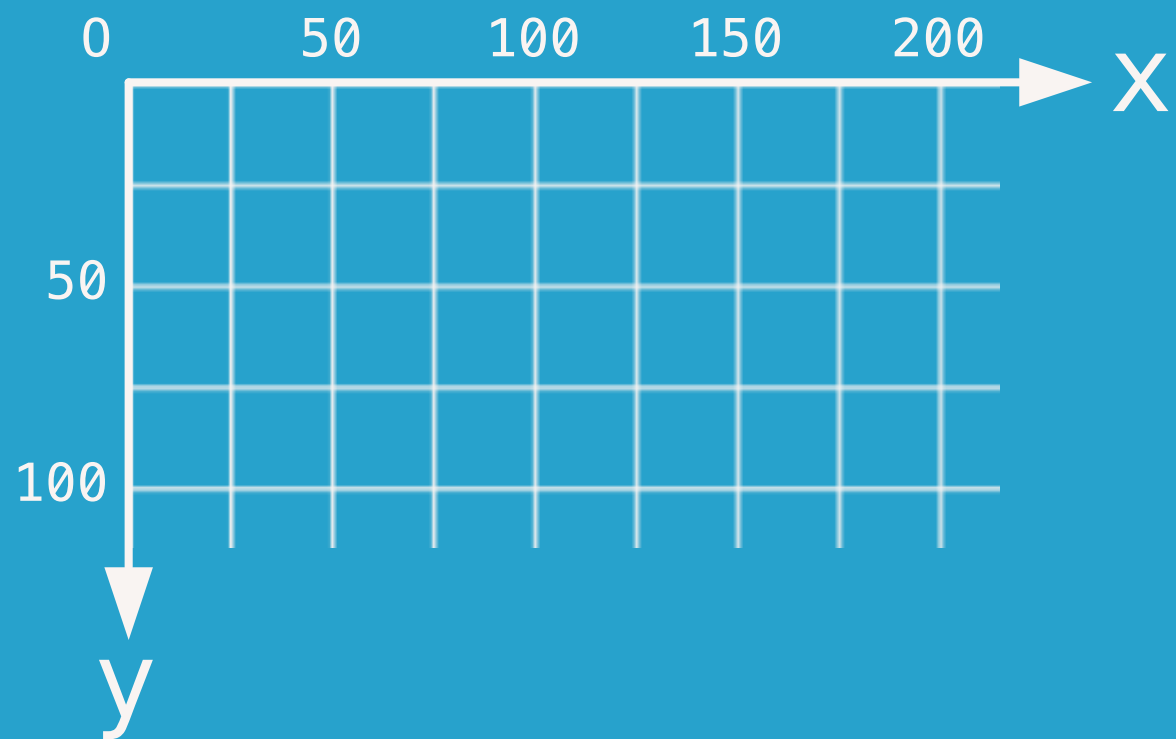

```
<circle  
  r="10"  
  fill="lime" stroke="#f9f4f2"  
  stroke-width="3"  
>
```

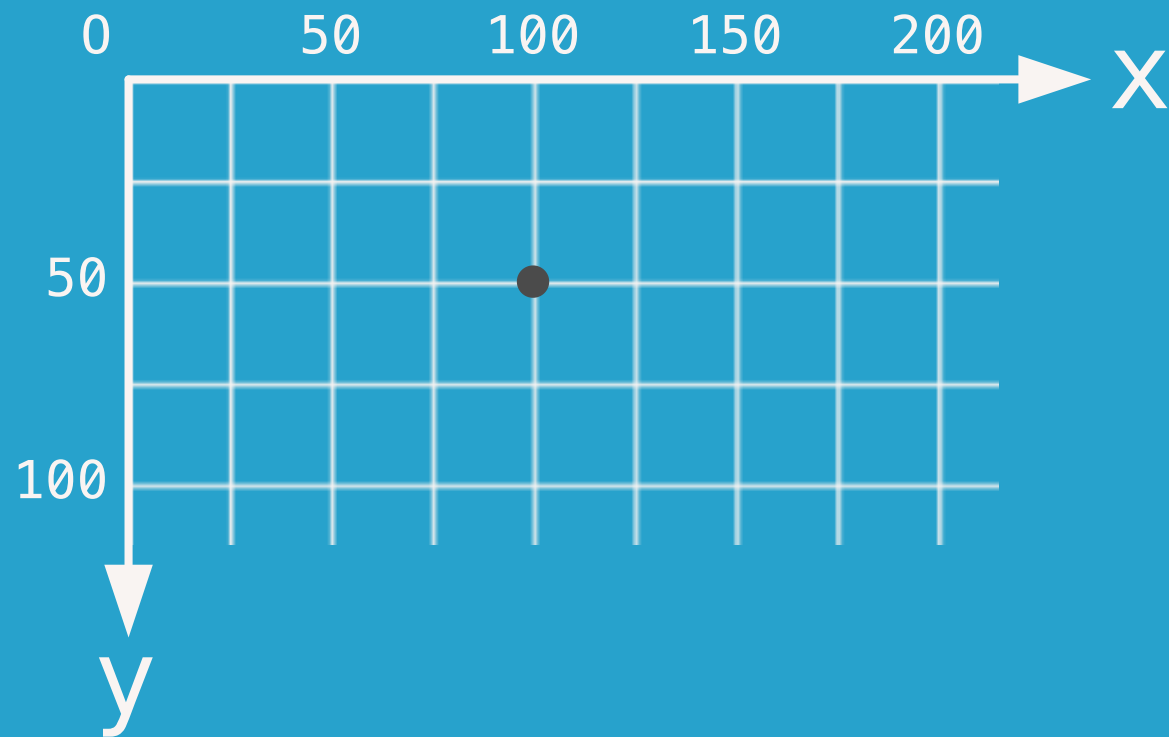


```
<circle  
  r="20"  
  fill="lime" stroke-width="2"  
  stroke-dasharray="9,5"  
  stroke-dashoffset="0"  
/>
```

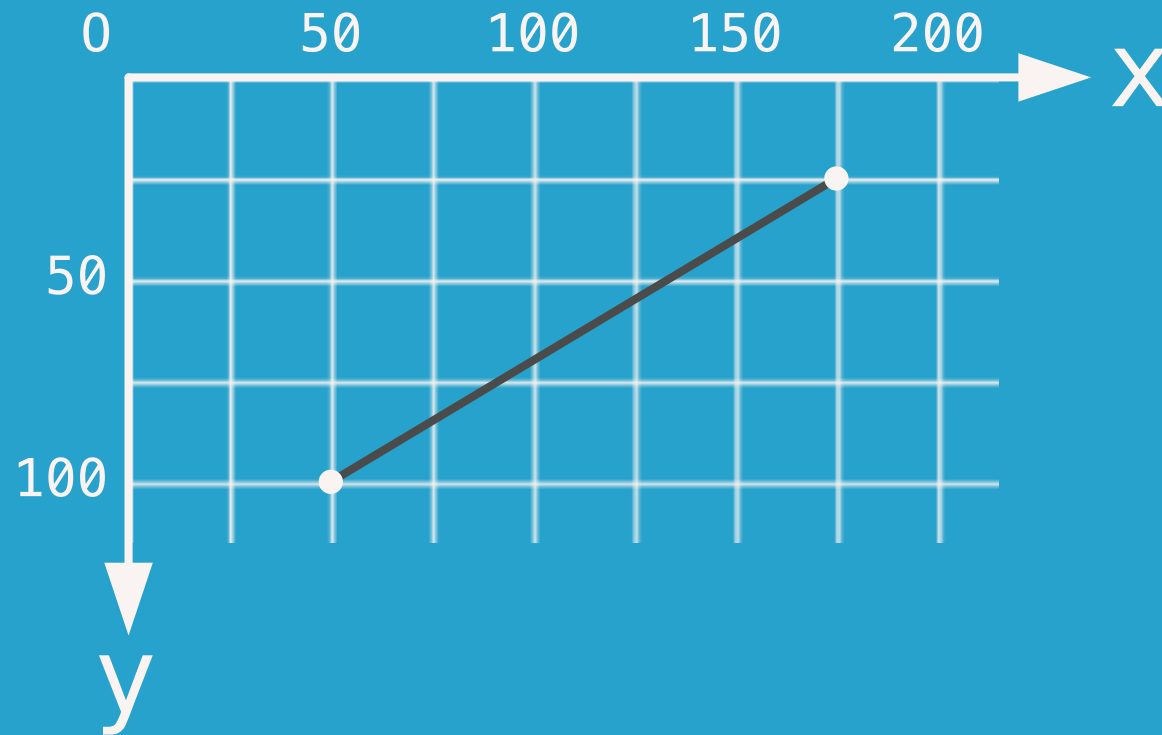
Opfriscursus wiskunde

Coördinatenstelsel

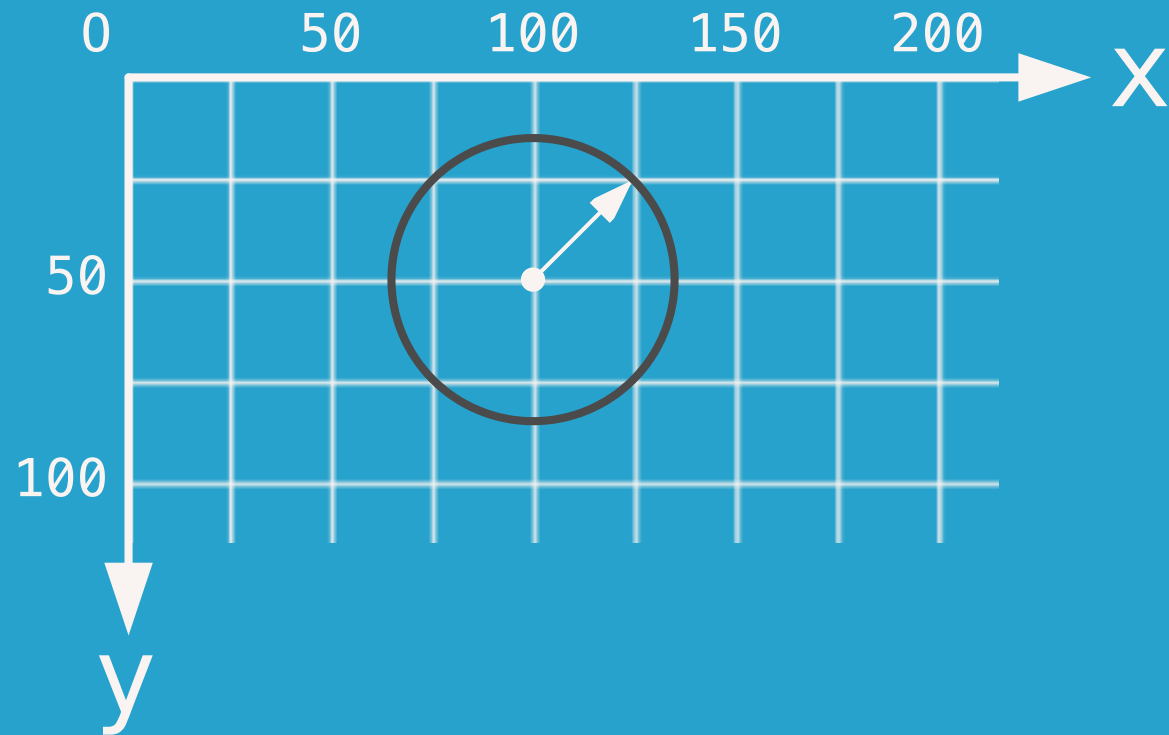




$(100, 50)$



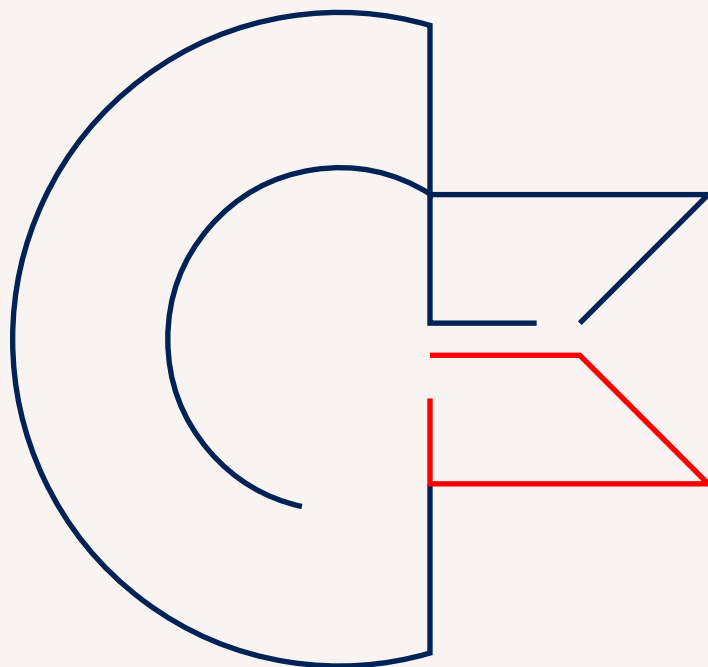
```
<line x1="50" y1="100" x2="175" y2="25"/>
```



```
<circle r="35" cx="100" cy="50"/>
```


Animatie!





Deel II

Over SVG

Tekst-gebaseerd

Letterlijk open source!

hex viewer: rect.png

0000	89	50	4e	47	0d	0a	1a	0a	.PNG....
0008	00	00	00	0d	49	48	44	52	IHDR
0010	00	00	01	2c	00	00	00	96	...,....
0018	01	00	00	00	00	4c	20	88	L .
0020	7f	00	00	00	35	49	44	41	5IDA
.....	..	..	..	..	..	..	..	..	
0068	4e	44	ae	42	60	82			ND.B`. .

Text editor: rect.svg

```
<svg viewBox="0 0 50 35"  
    fill="transparent"  
    stroke="#f9f4f2">  
  
    <rect width="40" height="20" x="5" y="7.5"/>  
  
</svg>
```

Vector-gebaseerd

(en dus schaalbaar)

Bitmap



Vector



Wanneer gebruiken?

Tekeningen

Logo's

Iconen

Bestandsgrootte



Bestandstype	Grootte
SVG	720 bytes
GIF	6.609 bytes
WebP	18.856 bytes
JPEG	45.812 bytes
PNG	46.463 bytes

Commodore logo static

Bestandstype	Grootte
SVG	1.687 bytes
MP4	152.875 bytes
Animated GIF	274.251 bytes

Commodore logo animated

Deel III

Doe het zelf via code

Text editor: `svg-via-code.html`

```
<html>
  <body>
    <svg></svg>

    <script>
      ...
    </script>
  </body>
</html>
```

CCC

create, configure, connect

```
// create
```

```
NS = 'http://www.w3.org/2000/svg'  
svg = document.querySelector('svg')  
circle = document  
    .createElementNS(NS, 'circle')
```

```
// configure
```

```
circle.setAttribute('cx', 50)
```

```
circle.setAttribute('cy', 75)
```

```
circle.setAttribute('r', 50)
```

```
// connect
```

```
svg.append(circle)
```

Deel IV

Tips & instinkers

Browserondersteuning

Test, test, test!

Veiligheid

(CSP COEP COOP CORB CORP CORS SOP)

Animations

~~SMIL~~, CSS or JavaScript?

SVGOMG

(protip)

joriszwart.nl/svg