

# Workshop 4D plannen

# SYNCHRO SOFTWARE

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**4D BIM proces adviseurs**

**Cadvisual Benelux BV**

The Year in  
**INFRASTRUCTURE**  
2018 Conference

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**Bentley®**

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building lifecycle management



Cadvisual is partner of the Year 2018!



# Workshop 4D plannen

# SYNCHRO

S O F T W A R E

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IMAGINE  
YOUR PROJECT IN A  
TIME MACHINE



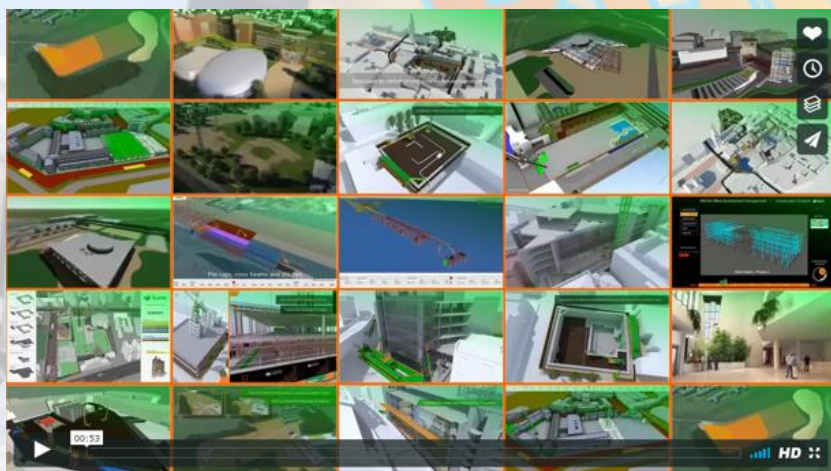
[www.synchro4d.nl](http://www.synchro4d.nl)

# Workshop Agenda

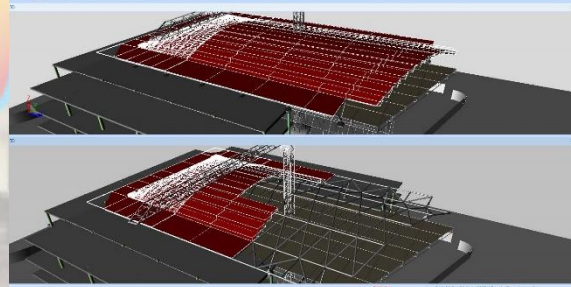
- 11:15 – 11:30 introductie 4D en Synchro
- 11:30 – 11:10 hands-on 4D plannen met Synchro PRO
- 11:10 – 11:25 4D project evaluatie Hololens en iPad
- 11:25 – 11:35 bevindingen en vragen

# Wat is 4D?

*Werkvoorbereiding- en planning op basis van 3D (BIM) om de bouwprocessen te sturen op kwaliteit, veiligheid en productiviteit.*



Naam	Duration	Start
Plan 1	2 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 2	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 3	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 4	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 5	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 6	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 7	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 8	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 9	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 10	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 11	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 12	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 13	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 14	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 15	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 16	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 17	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 18	1 Dagen	06/09/17 17:00 - 07/09/17 09:00
Plan 19	1 Dagen	06/09/17 09:00 - 07/09/17 17:00
Plan 20	1 Dagen	06/09/17 17:00 - 07/09/17 09:00





HET PLATFORM VOOR VIRTUEEL BOUWEN

4D BOUWPLANNING & PROJECTMANAGEMENT



Toonaangevende Professionals in de Civiele Techniek

# Workshop 4D plannen

*Maak je eigen 4D planning in Synchro PRO!*

The screenshot displays the Synchro PRO software interface. The top menu bar includes File, Plan, Assign Resources, 3D, 4D Review, Project Controls, Reports, Windows, and Navigator. The main workspace is divided into three panes:

- Resources:** A list of resources with columns for ID, Name, and Duration. Key items include:
  - 21 A1170 Plaatsen "California ST-205" brug railing (20)
  - 22 A1095 Plaatsen 48"-60" CIDH palen onder oplegging (6 stuks) (12)
  - 23 0412000116.4 Constructief - Keerwanden (fase 2) (62)
  - 24 A1300 Ontgraven (8)
  - 25 A1310 Bekisten - wapenen - storten - uitharden poeren (10)
  - 26 A1320 Bekisten - wapenen - storten uitharden wand landhoofd (30)
  - 27 A1330 Ontgraving aanvullen (30)
  - 28 A1340 Plaatsen "California ST-205" brug railing (40)
  - 29 0412000116.5 Constructief - Brug (fase 2) (91)
  - 30 A1055 Verwijder bestaande brug, ontgraven (16)
  - 31 A1190 Plaatsen 24" CIDH palen onder landhoofd (20 stuks) (16)
  - 32 A1200 Plaatsen 48"-60" CIDH palen onder oplegging (6 stuks) (12)
  - 33 A1210 Bekisten - wapenen - storten - uitharden onderstel landhoofd (56)
  - 34 A1220 Plaatsen landhoofd en kolommen (56)
  - 35 A1230 Plaatsen geprefabriceerde betonnen poeren (16)
  - 36 A1240 Plaatsen PC betonnen prefab liggers (20 stuks) (40)
  - 37 A1250 Bekisten - wapenen - storten - uitharden brugdek (20)
- Schedule:** A Gantt chart showing the project timeline from January 2019 to October. Tasks are represented by horizontal bars with color-coded start and end dates.
- 3D Model:** A 3D rendering of a bridge structure with various components highlighted in different colors (blue, green, red, cyan) corresponding to the appearance profiles.

At the bottom of the interface, there is a section for "Appearance Profiles" with a legend:

- Asfalteren toplaag (Blue)
- Beton storten (links-rechts) (Green)
- Heien funderingspalen (Red)
- Installeren railing (Cyan)
- Storten betonnen elementen (Light Green)

# Navigeren in de Gantt Chart

- Scrollen
- Pannen
- Zoomen
- Zoeken

The screenshot displays the Synchro software interface. On the left, a 'Resources' list includes items like 'Equipment Resources', 'Material Resources', and '3D Resources'. The main area features a Gantt chart with tasks such as 'Plaatsen "California ST-20S" brug railing', 'Ontgraven', and 'Bekisten - wapenen - storten - uitharden poeren'. The chart spans from January 2019 to September 2019. Below the Gantt chart, a 3D model of a bridge structure is shown, with an 'Appearance Profiles' legend on the left. The legend lists profiles like 'Asfalteren topklaag', 'Beton storten (links-rechts)', and 'Heren funderingspalen'. The 3D model shows a bridge deck supported by piers, with different colors corresponding to the appearance profiles.

# Navigeren in het 3D venster

- Roteren
- Pannen
- Zoomen
- Filteren

The screenshot displays the Synchro software interface. The top part shows a Gantt chart with tasks such as 'Plaatsen "California ST-20S" brug railing', 'Ontgraven', and 'Verwijder bestaande brug, ontgraven'. The bottom part shows a 3D model of a bridge structure with a legend for 'Appearance Profiles'.

**Appearance Profiles**

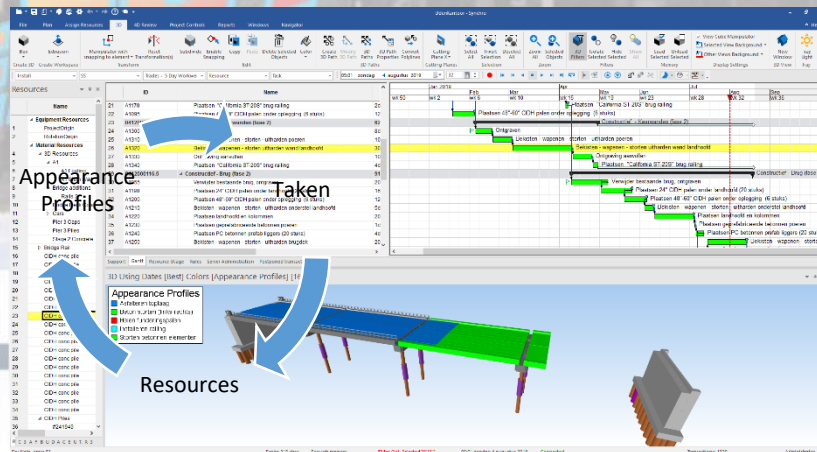
- Asfalteren topklaag
- Beton storten (links-rechts)
- Heien funderingspalen
- Installeren railing
- Storten betonnen elementen



# Resources koppelen

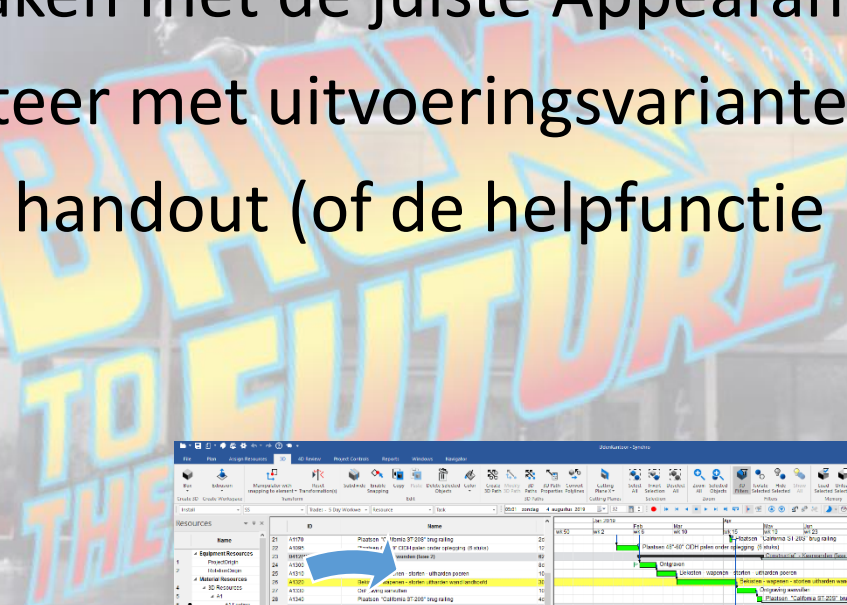
5 stappenplan (zie handout):

1. Selecteer een (of meerdere) Resources
2. Selecteer een (of meerdere) taken in de Task List
3. Selecteer het gewenste Appearance Profile
4. Koppel de Resource(s) aan de geselecteerde taak/taken
5. 4D Review



# Plan je project!

- Koppel de 98 3D-Resources aan de juiste planningstaken met de juiste Appearance Profiles
- Experimenteer met uitvoeringsvarianten!
- Gebruik de handout (of de helpfunctie met F1)



Appearance Profiles

Resources

Appearance Profiles

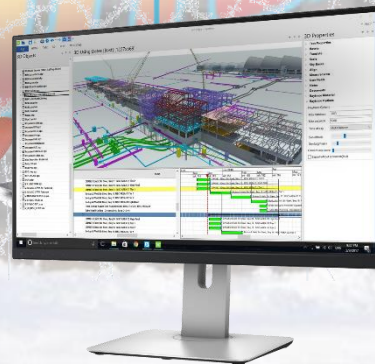
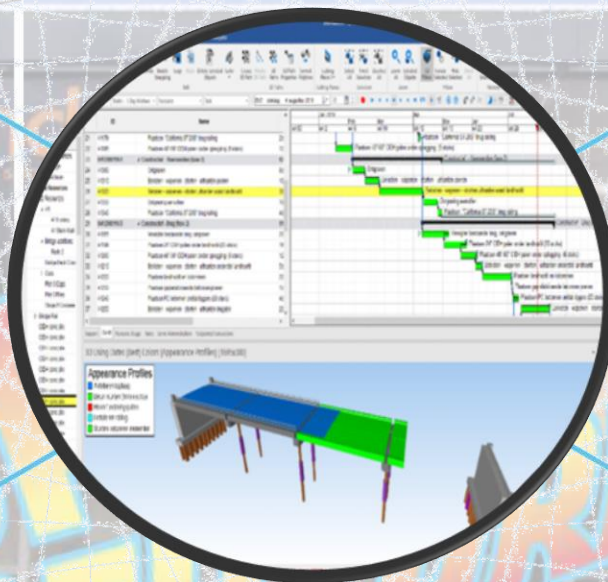
- Appearance profiel
- Materialen profiel
- Mixen profiel
- Vrij profiel
- Standaard profiel

Winterschool

Workshops / Presentaties / Clinics

# Evaluatie middels iPad & Hololens

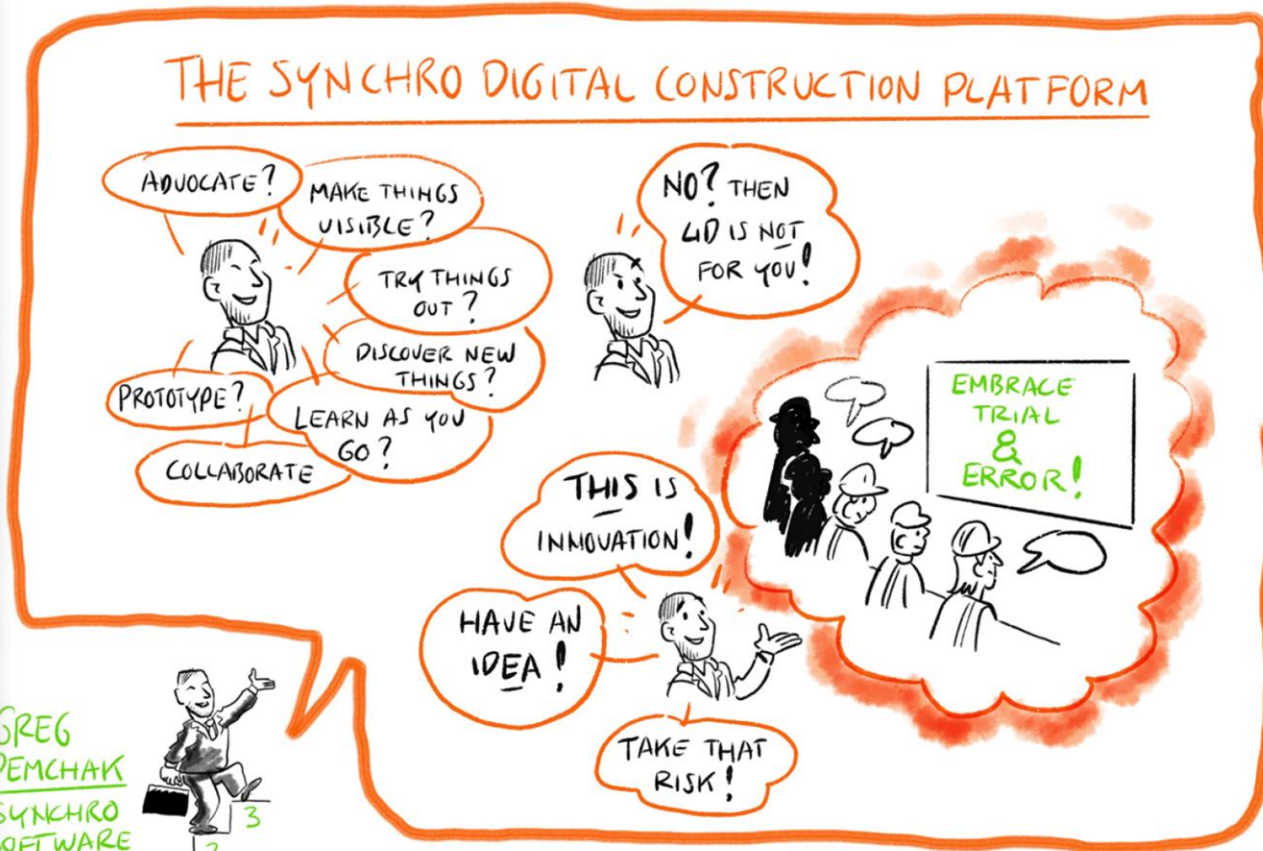
Woensdag  
23 november 2018



VNMG

Taakgerichte Professionals in de Civiele Techniek

# Bevindingen en vragen



GREG DEMCHAK  
SYNCHRO  
SOFTWARE  
LTO

