



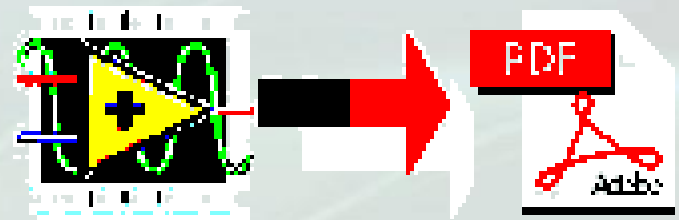
Dynamic Controls

(in Executables)



Carya Automatisering Delft

- **Wiebe Walstra**
- **Test- en Meetopstellingen**
- **Olie & gas t/m lucht- & ruimtevaart**
- **Pilot plants: farmacie, chemie**
- **Projecten en ondersteuning**





Agenda

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- **Intro**
- **Other solutions**
- **The idea...**
- **Questions\Discussion**



Questions



Introduction



Dynamic controls

- **Create any number of controls**
- **Put on any place on FP**



Dynamic controls

- **Use cases:**
 - **Re-usable configuration**
 - **User defineable MMI**
 - **...**



Dynamic controls

- **Still not possible!**



Previous solutions



Previous solutions

- **Max. nr. of static controls**
 - **Does not scale well**
 - **All controls end up on BD**



Previous solutions

- **Scripting**
 - **Only in dev. env.**



Previous solutions

- **Control images in picture control**
 - **Pic. ctrl does not scale well**
 - **Transparency**



Previous solutions

- You always need:
 - Some definition of ctrl (compiled ctrl)
 - Place to put it



The idea..



The idea

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- Last year...
- Samuli
 - **blog**

<https://decibel.ni.com/content/groups/ui/blog/2013/01/24/adding-new-ui-objects-to-the-front-panel-and-even-link-data-on-run-time>



The idea (finally)

SUBPANELS (lots of them)



The idea

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- **Put enough subpanels on FP**
- **Fill with controls**
- **Put at correct place**
- **Use VI's, not ctl's**

(demo)



CARYA The idea

- **Put enough subpanels on FP**
- **What is enough?**

(demo)



CARYA Features

- **All events work**
- **Right click menu's work**
- **All normal properties work**
- **Transparency**
- **Moveable by user**
- **Dynamic loading**



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Features

- **Can use everything in VI**
- **(demo)**



Using VI's

- **Subpanel can overlap**
 - **Get Bbox of content**
 - **Hit test**
 - **Put active in frontmost subpanel**



Questions?