

Deltares

Enabling Delta Life





Break-out: the cloud as future infrastructure...?

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The cloud as future forecasting infrastructure...(?)

- Cloud: a lot of new (technical) jargon, but what is it?
- I think it's rather simple...:
 - (**remote**) desktop or a server on which you can easily log in to...
 - Which is **somewhere** in the world...
 - Where you can run your **applications**...
 - Have access to your **data**...
 - Which is **maintained** by an invisible IT person...
 - Guarantees an **uptime** of (nearly) **100%**...
 - This all sounds pretty **handy**...
 - But....



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Cloud is...

- **H** – Hardware
- **O** – Operating
- **S** – System
- **A** – Applications
- **N** – Numerous
- **N** – Not known
- **A** – Aspects

a rescue?

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Pro's & Con's of the cloud...

Advantages...	Don't knows...	Disadvantages...
IT relief...(unburden my IT colleagues) – small organisations	Where's my data...?	Are my applications cloud-ready...?
Uptime guaranteed...	Is the 'cloud' in my country...?	How about security...?
Cloud (provider) services...	Who manages what part...?	Data traffic (up/downloads)...
Automatic deployment (using Docker)	Modelling...	Costs unclear...
Easy up/downscaling	Is Google monitoring me (and my forecasts)...?	Cloud specific knowledge...
Management (performance)		
...



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- **Delft-FEWS 2018.02** is cloud-ready
 - It runs in cloud environments...
 - Using Docker 'images' of server side components (MC, AI/Tomcat, FSS, WS, Database, Archive)
 - 1 hour to set up
 - Security settings are 'a pain'...(have to build up experience)
 - Cloud applications of **Delft-FEWS 2018.02** are running in:
 - UK: FFFS system – development (but available) – Azure (Deltares, JBA, EA)
 - NL: CoVadem – Dutch system for monitoring waterways navigation depths – AWS (Deltares)
 - AUS: Douglas Council – pilot system – Azure (by JBA, UK)
 - Taiwan – test environment (Taiwan)

Pro's & Con's (and don't knows) of the cloud...

Advantages...	Don't knows...	Disadvantages...