DYALOG

Belfast 2018

The Road Ahead

Morten Kromberg, CXO, Dyalog

Time to find new maps!

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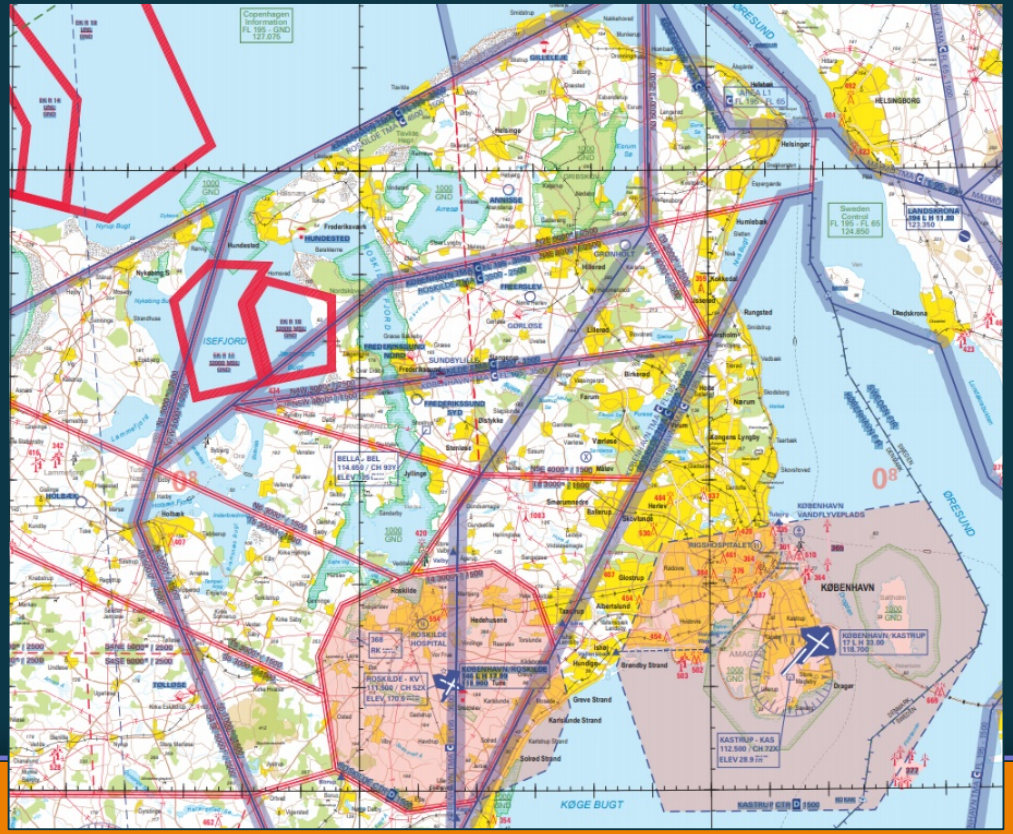

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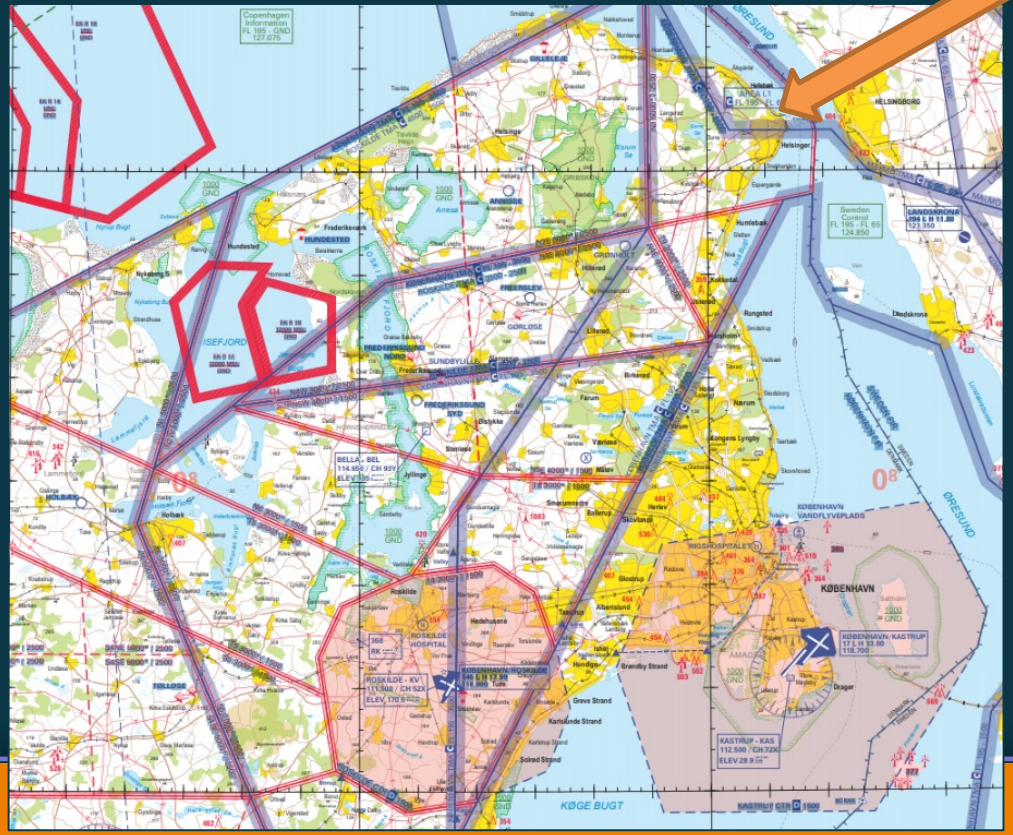
LO-Skolen



Glimpses of a Modern User Experience

Imagine you meet a young data scientist (let's call her Mary) who says...

Suki - Dyalog Intern (2015)

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Glimpses of a Modern User Experience

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My professor says that you know something about this cool new language for analytics - called "APL"?

I have this crazy idea that it would be nice to count the frequency of digits used in numeric fields within CSV files, to check for fake data(!)

Suki - Dyalog Intern (2015)

Example...

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Type,North,South,East,West
Red,123,270,377,187
Blue,357,377,124,179
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… but I can't find a Python Library to do this ☹
… can you help? ☺

You came to the right place ...

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Preparing Mary's Linux Machine

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- Grab Dyalog's Docker Utils

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git clone https://github.com/mkromberg/~~d18mary~~d18demo
```

Continuing under Linux ...

In order of appearance...

	Dyalog APL for playing with data
	git and github for sharing / distributing code
	Docker & DockerHub for running & distributing containers
	Visual Studio Code for editing code (and managing git)
	Amazon Elastic Compute Cloud (EC2) on-demand computing power

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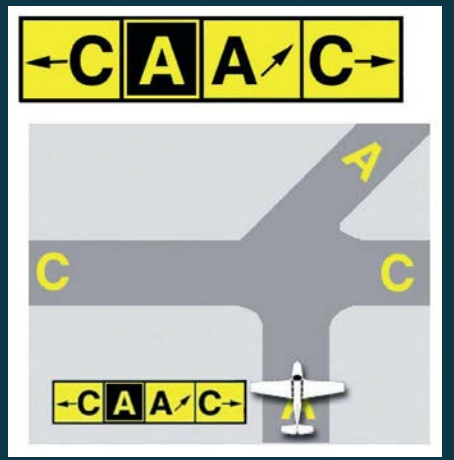

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- Simple APIs
- APL is coming home

All you need is ... Docker

- As soon as Docker is installed, the rest is easy
- Packaging, distribution and scaling is simple
  - Applications – WITH dependencies - can be up and running on any platform in seconds
  - (and the "reverse": sending documentation of problems back to developers is now so easy!)
- Equally attractive to
  - New users who wanted to get started quickly
  - Corporations who need to
    - deploy applications on the cloud, or
    - implement "Continuous Integration" workflows

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- More public containers and cloud images (dyalog, jsonserver, miserver, jupyter, tamstat, ...)
- Integration with VS Code, Emacs and other tools
- "Project Model"
  - Define a "Dyalog APL Project" structure
  - Dependency management
  - Unit (& other) Testing

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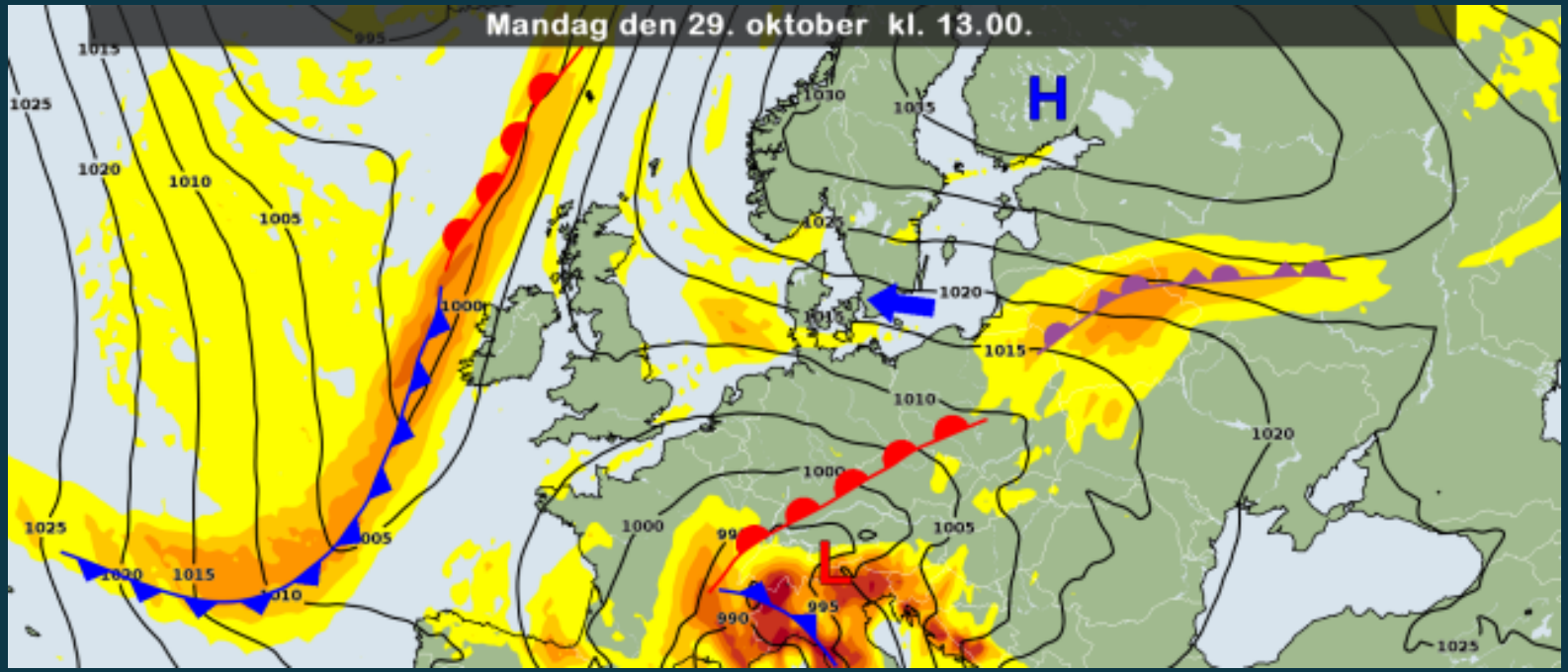
- A bridge from APL to the dotnet core
  - Access to rapidly growing collection of cross-platform utilities and libraries
- Support pure script-based applications
  - Notation for Array Constants (script-able data)
  - "#!" script support

New Maps and Signs ...



Related talks...

Today:

- D05: RIDE 4.1 and Next Generation Integrations (Gilgamesh Athoraya)
- D04: Array Notation Mk III (Adam Brudzewsky)
- D06: Cross-Platform User Interfaces (Brian Becker)

Tomorrow:

- U06: The Workspace is Dead! Long Live the Workspace! (Paul Mansour)
- U05: The APL Package Manager (Gil)

Wednesday:

- U09: The evolution of the APL Tree Library (Kai Jaeger)
- D11: Cloud Computing with APL (Morten)
- U15: ⎕WC on the Web (Chris & Michael Hughes)
- U16: Serverless APL (Marko Vranic)

Thursday:

- D12: Jupyter Notebooks (Adam)

Tune in again next year...

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