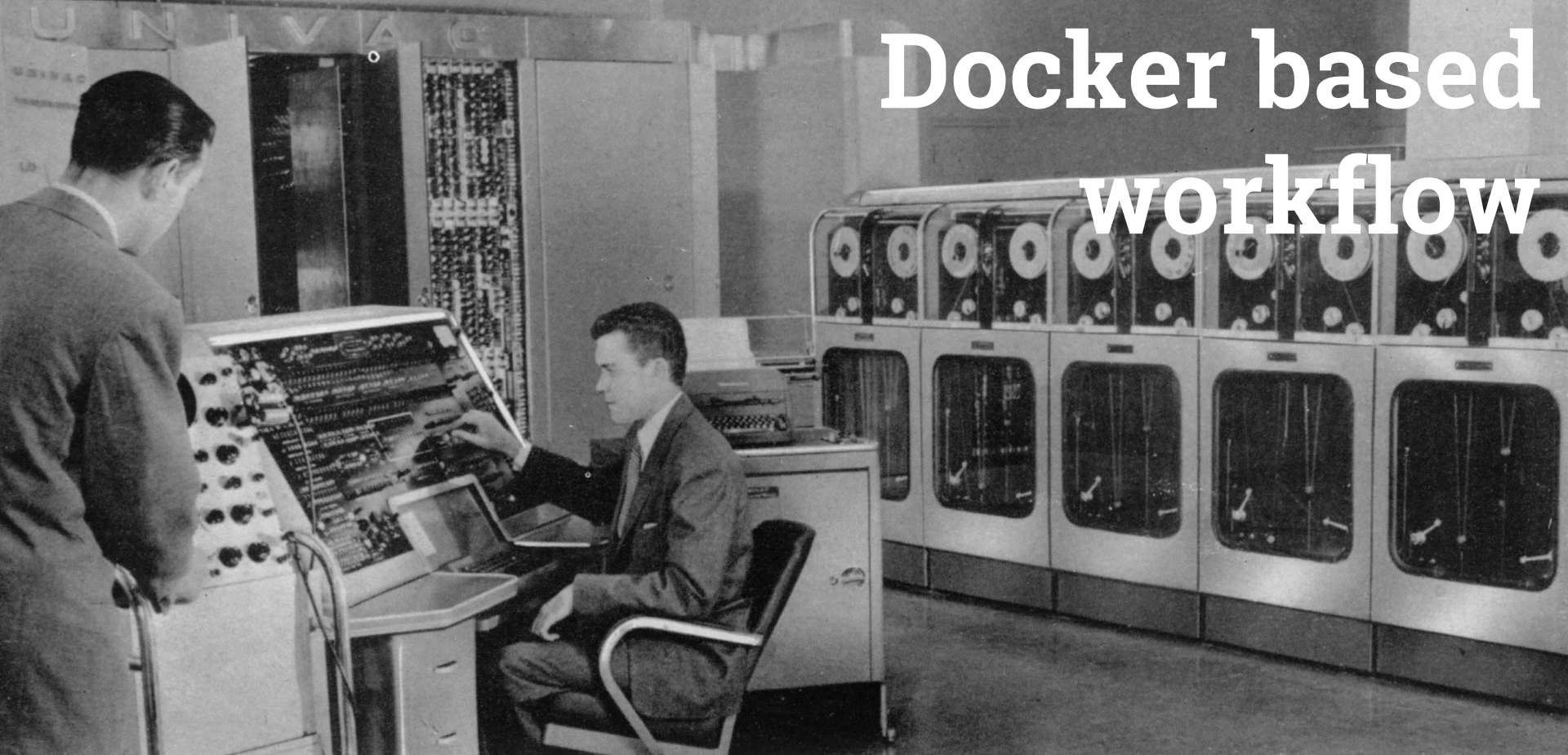


Docker based workflow



Docker based development

- What is the problem we wanted to solve ?
 - Easy setup of devel environment
 - Configuration management
- Our solution - architecture
-

Odoo Environments

- Dev environment on your laptop (virtualbox / vagrant / ...)
- Staging/Testing environment
- Production Env

Challenge to keep dependencies/module lists/etc consistent

Configuration management



Not really suited for dev/staging/production environment

Docker



Solves the configuration management ?

What we did

1. Created odoo models containing instance data with easy UI
2. Created 4 scripts that
 - Setup working environment
 - Download production DB backup
 - Restore DB backup
 - Start docker container with odoo
3. Always consistent with the state as configured
4. Profit :)

Odoo models for odoo instances

- Hierarchical
 - Inherit settings from parent
- Integration with github and gitlab api
 - Fetch modules list from the repo
- Export the settings with a specific URL
 - Fetching configuration data is done with a single http request

projectsetup - Setting up a work directory

- Input = instance url data
- Store instance data into the directory
- Fetches git sources (in case of development instance)
 - Uses git work-tree in order to checkout a single repo multiple times
- Check odoo module manifest for missing dependencies
- Generate Dockerfile

Fetching and restoring Database dbbackup and dbrestore

- Script to download DB Backup
 - With odoo v8 v9 (v10?) api, based on stored instance data
 - No assumptions on deployment
- Script to restore DB for the downloaded backup
 - Restores DB and attachments
 - Resets user passwords to enable easy testing
 - Disable cron jobs you don't want to run in test environment (fetchmail)
 - Reset DB uuid
 - Setup test email config: debugmail.io
 - ...

Run docker : runserver

Just starts docker to run odoo with the right parameters

What's next

- Local odoo instance can now be easily setup, within 5 minutes
- Setup Testing/staging instance on a cloud server
 - Scripts work with a remote docker machine too for test instances
 - We are experimenting with **traefik.io**
- Setup production environment
 - For now we still use ansible, so we created a dynamic environment script (only 200 lines code)
 - We want to migrate to 100% docker in production

Demo

- Create a new instance in odoo
- Setup the working directory
- Download backup DB
- Restore DB
- Run odoo
- Debugging session with pycharm

Questions - More info - Show me the source

<http://www.apertoso.be>

<https://github.com/apertoso/infrastructure>

<https://github.com/apertoso/tools>

Thank you