

# Conformance checking in a high volume production line

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## About MKC

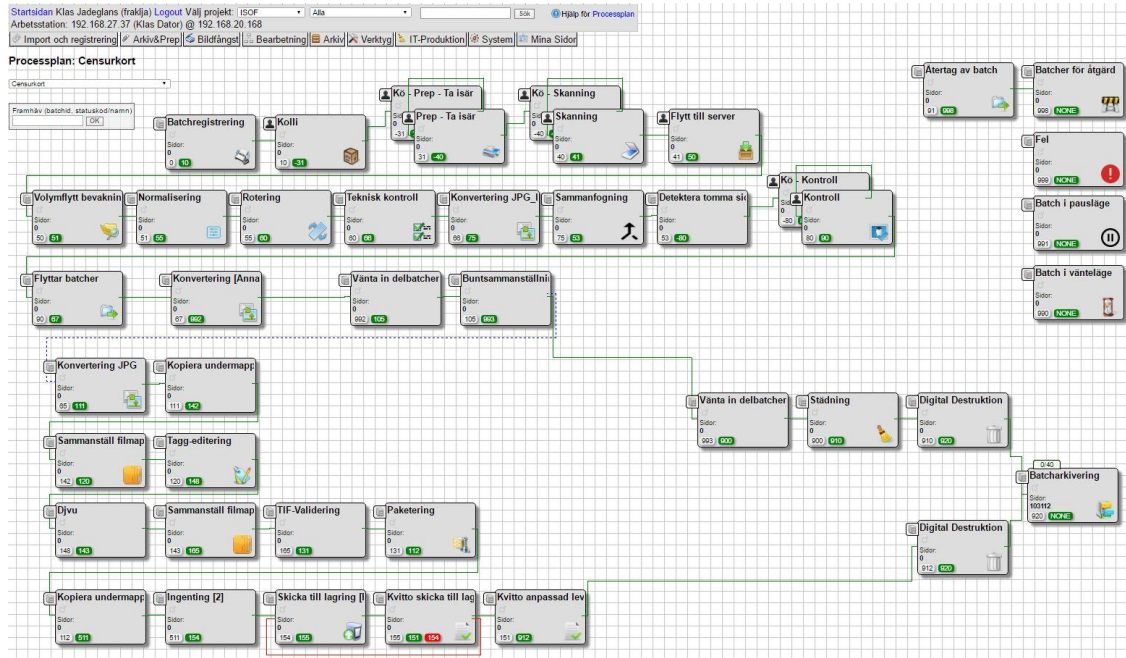
### A Digitization factory for the cultural heritage



## About MKC

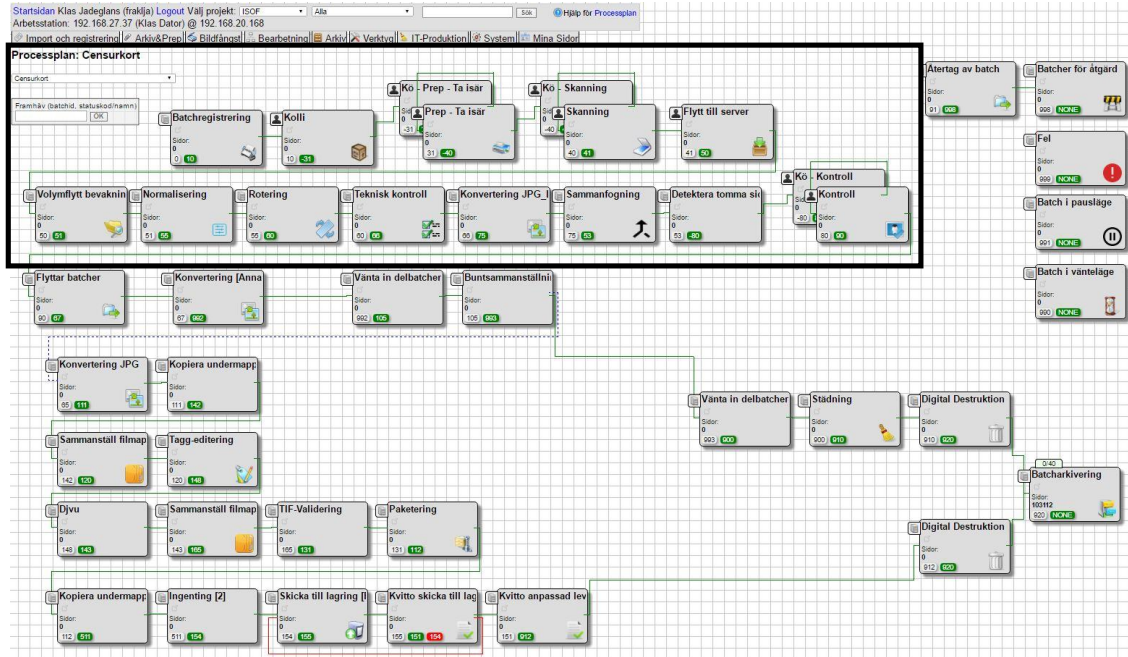
- **A part of the Swedish National Archives**
- **A national government resource for digitizing**
- **About 65 employees**
- **Located in the center of Sweden**
- **Focus on high volume production of digital images**
- **~100.000 images per day**
- **...loose sheet, bound books, newspapers, maps etc**
- **Have produced more than 200 Million digital images since we switched from microfilm in 1995**
  
- **We do not archive any images ourselves...**
- **...we deliver all images to others that archive**

# Production Flow System



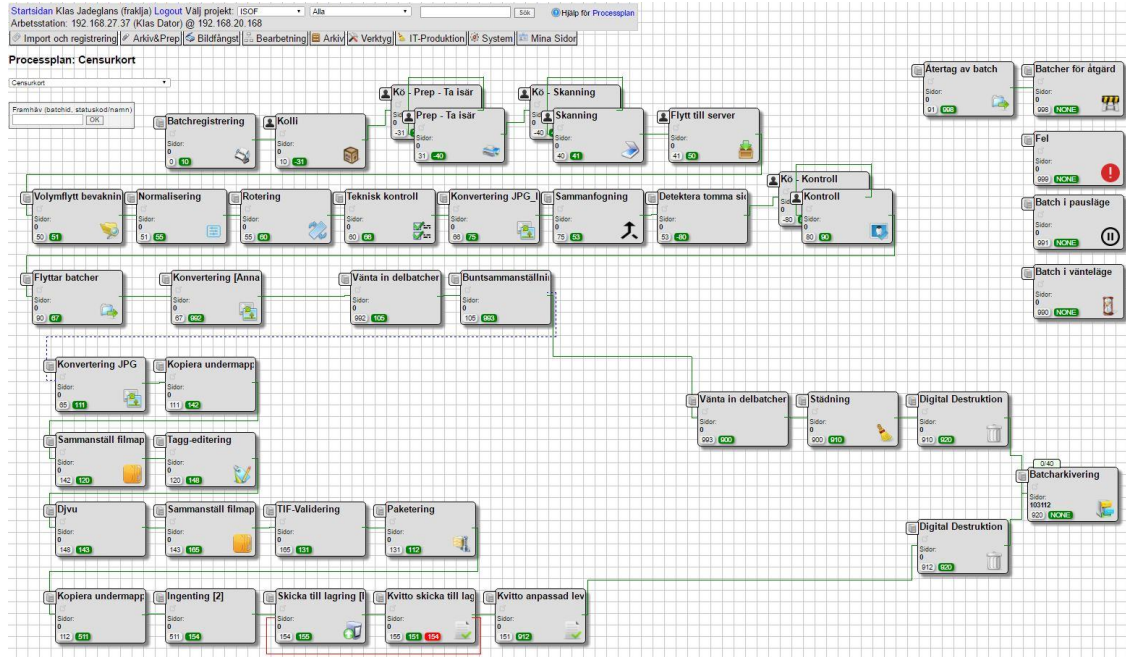
- **Web browser GUI for human operators**
- **Autonomous "workers" for automatic operations**
- **17 virtual linux servers, 1 Windows app**
- **Designed by me, built by me and my colleagues**
- **Integrates to some 3rd-party components**

# Production Flow System



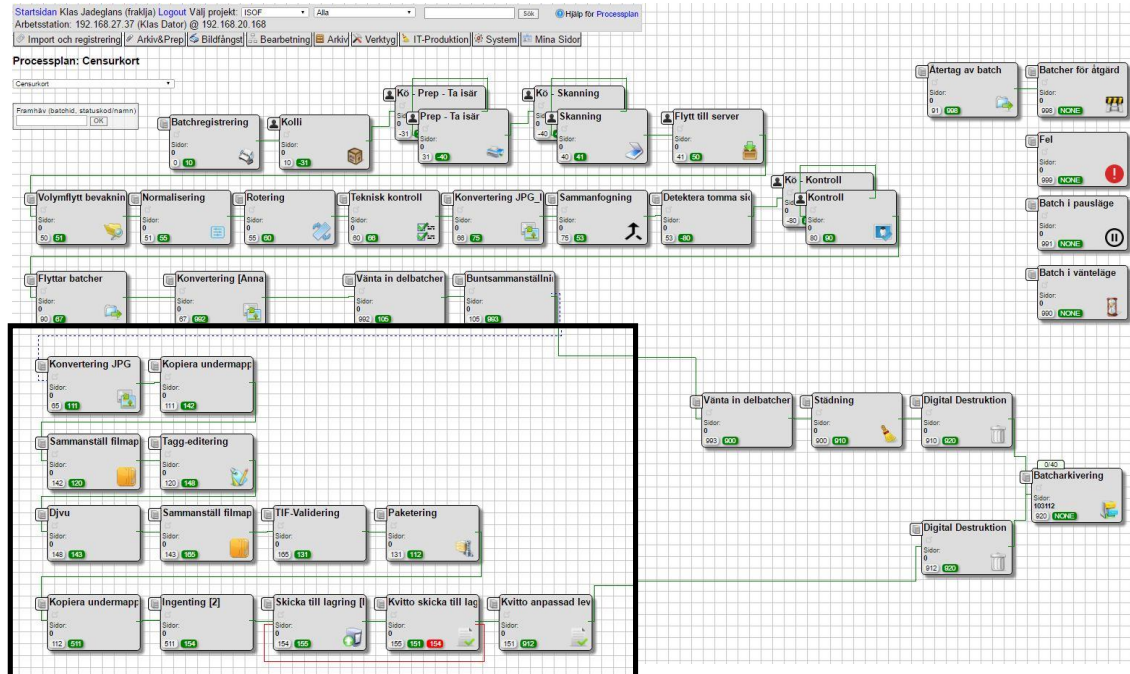
- **Production:**
  - Registration, preparation, scanning, quality control etc

# Production Flow System





# Production Flow System



- **Post production:**
  - **Image conversion, OCR, packaging, delivery etc**



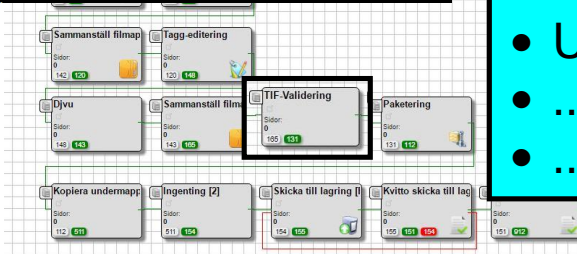


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Created individual report /home/mkc/DPF Manager/reports/20161121/1/737-00000737.tif
Created individual report /home/mkc/DPF Manager/reports/20161121/1/738-00000738.tif
Created individual report /home/mkc/DPF Manager/reports/20161121/1/739-00000739.tif
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Created individual report /home/mkc/DPF Manager/reports/20161121/1/775-00000775.tif
Created individual report /home/mkc/DPF Manager/reports/20161121/1/776-00000776.tif
ERROR - An error occurred.
Out of memory
  
```

## Performance:

- Only greyscale images in test:
  - one tif: 16 seconds
  - batch(776 tifs): 355 seconds
  - 0.45 seconds/image
- Really good
- Unfortunately "out of memory"
- ...summary was 321.000 rows
- ...since ALL 776 images had errors



## Wishes

- **Make install easier for Non-graphical systems**
- **"Totally non-human" mode**
  - **Ultra silent**
  - **command line return code**
- **Option to select output:**
  - **summary**
  - **individual files**
  - **only final conclusion (number of pass/fail)**
- **Unlimited batch sizes**
- **Knowledge base**
- **Make it "for dummies"**
  
- **Finally:**
  - **TIA**

# Thank you!

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