

Transparent Assessment Framework

Project outline

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Aim

*To implement a framework to organize **data**, **methods**, and **results** used in ICES assessments, so they are easy to **find** and **rerun** later with new data.*

ICES advisory process

1. **Work** within institutes
prepare data, prepare model, run model(s)
2. **EG** meeting
finalize model run, write report + draft advice sheet
3. **ADG** meeting
finalize advice sheet
4. **ACOM** meeting
finalize advice

Current workflow

Containers

- **Chapter** in report
data, results
- **Stock annex** in report
data-methods, assmt-methods
- **Data folder** on Sharepoint
data, assmt-methods, results
- **Advice sheet** via Stock Assessment Graphs
results
- **GitHub** EG repository
data, assmt-methods, results

Areas for improvement

- **Chapter** in report
hard to find reports, hard to copy tables from pdf
- **Stock annex** in report
hard to find newest version, ambiguity, lack of detail
- **Data folder** on Sharepoint
depends on stock assessor, can be missing, no guarantees
- **Advice sheet** via Stock Assessment Graphs
clunky pathway from assessment to SAG database
- **GitHub** EG repository
not linked into the ICES system

New framework

Objectives

The new framework should be:

- **Encapsulated:** entire pathway from input DBs to SAG in one system
- **Quality controlled:** data can be traced to sources, values are checked
- **Repeatable:** data preparation and assessment workflow is recorded and can be run
- **Transparent:** anyone can browse on the web

Objectives (cont.)

Make it easier to:

- Find data and results from a given assessment
- Rerun model with different data or assumptions
- Prepare and run an update assessment

⇒ After initial cost, will save time for EGs, ADGs, and ACOM

Objectives (cont.)

Help people to:

- See **changes** in model setup and data between years
- Use reproducible research to strengthen **institutional memory**
- Access data and results from all stocks for **big-picture research**

System workflow (core)

System workflow



data values
=> model input files



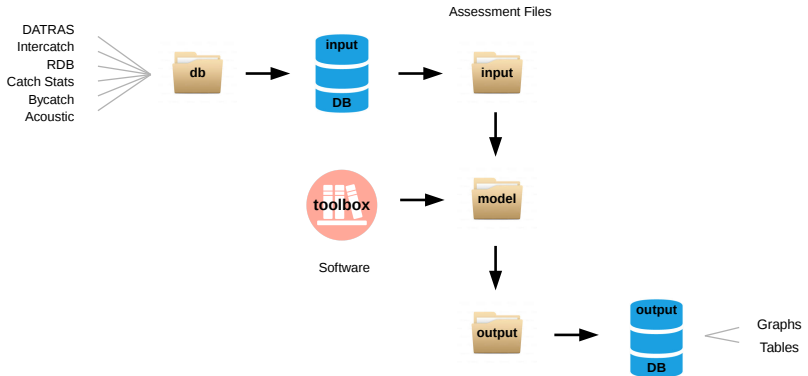
model executable
+ model input files
+ model config files
=> model output files



model output files
=> standard output files

System workflow (databases)

Databases for input and output



User interface

User interface

Open taf.ices.dk in a web browser

Browse (everything is open) or **log in** to modify/run assessments

- **Stock mode** upload, edit, save, run

- **Boss mode**

HAWG	NWWG
<input checked="" type="radio"/> her-3a22	<input checked="" type="radio"/> cod-iceg
<input type="radio"/> her-47d3	<input checked="" type="radio"/> sai-faro
<input checked="" type="radio"/> her-67bc	<input checked="" type="radio"/> sai-icel
<input checked="" type="radio"/> her-irls	<input type="radio"/> smr-5614
<input type="radio"/> ...	<input type="radio"/> ...

Download any dataset into R using [read.csv](#)

Key benefits (after initial costs)

- High **quality** science: online, peer-reviewed, reproducible
- Improved **time efficiency** and **reduced workload** on EGs
- Much more **open and structured** than current workflow

Timeline

2016–2018

Design and implementation

Around 10 example stocks, one from each EG

2018

Project review

2018–2020

Training and collaboration with EGs

Large-scale deployment of as many ICES stocks as possible

Thanks!



Questions?