

EIRENE integration in IMAS (with focus on ACH contribution)

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Integration roadmap (general)



- Code is version controlled (with mirror on the PSNC repository server when ready)
- Code compiles and runs on the Gateway
- Code I/O goes through IDSs
- (optional) Actor is generated (using iWrap)

EIRENE status



- Code is version controlled
- Code compiles and runs on the Gateway
- Code I/O goes through IDSs*
- (optional) Actor is generated (using iWrap)

^{*} Note about this point on the next slide

Integration roadmap (ACH contribution)



- Code compiles and runs on the Gateway
 - help with environment set-up
 - help with missing module identification, installation (if possible)
- Code I/O goes through IDSs
 - help with wrapper design (wrapper template examples)
 - help with data dictionary integration
 - help with specific integration problems (ggd related for example)
- Actor is generated (using iWrap)
 - help with integration of the code specific parameters
 - actor generation process tutorials

Possible EIRENE integration plan with ACH contribution



- Code compiles and runs on the Gateway:
 - Is it possible to start with reduced set of 'interface' routines to read/write input/output EIRENE data (including grid)? May be reduced test case?
 - Identify missing modules and introduce pkg-config way of including external libraries
- Code I/O goes through IDSs
 - Starting point exists (see presentation from EIRENE workshop, <u>https://indico.euro-fusion.org/event/1373/contributions/4651/attachments/2275/4294/IMAS_forEIRENE.pptx</u>) use B2 grid saving routines (and other output?)
 - Identify the possibility to include additional quantities foreseen (see https://indico.euro-fusion.org/event/1373/contributions/4655/attachments/2291/4328/SumIMAS_DB.pptx) in the data dictionary
 - (if above is not possible) identify the possibility of including postprocessed data to the data dictionary (depending on foreseen use cases) or open JIRA tracker to extend data dictionary
 - Investigate the possibility to use Grid Service Library (GSL) to work with several grids used in EIRENE

Practical steps and foreseen time line



- Decide on the contact person in EIRENE team (me from ACH side)
- Start to discuss first point (if agreed)
- Complete first bullet during February 2022 (if imediate start is agreed)
- Complete first part of the second bullet (EIRENE output+B2 grid in IMAS) in February-March 2022