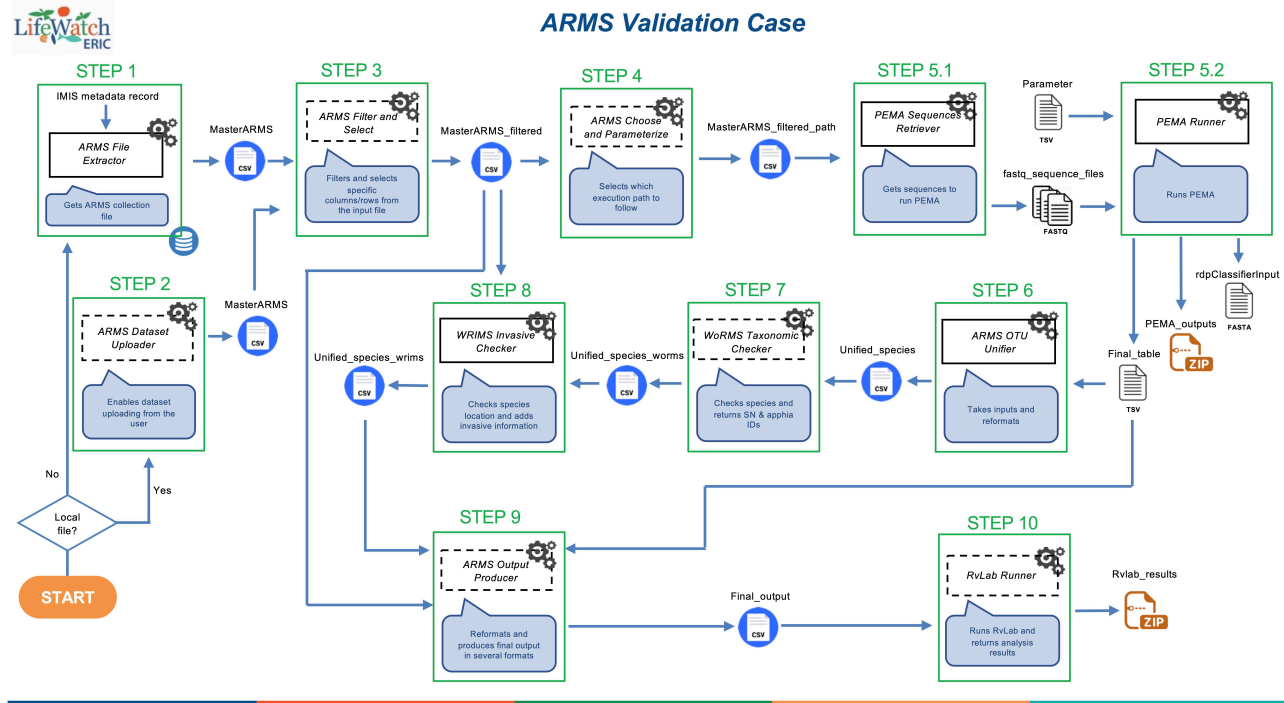
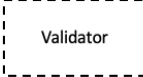
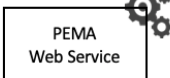
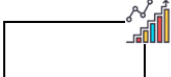
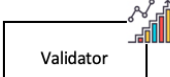
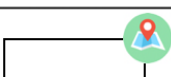
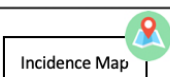
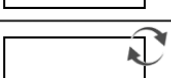
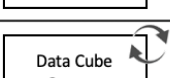
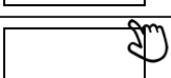
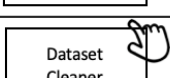
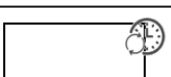
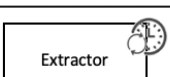
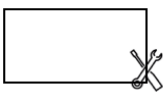
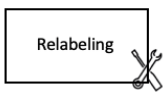
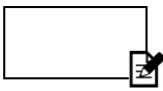
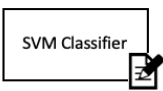
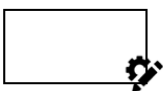
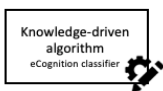
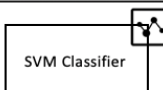
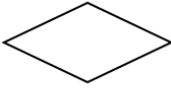
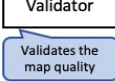
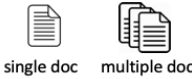


## How to read the diagram



| SYMBOL                      | SYMBOL TYPE                                                                         | DESCRIPTION                                                                                                                                    | EXAMPLE                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1. Implemented task         |  | A rectangle represents a process step like a basic task or an action.                                                                          |  |
| 2. Not yet implemented task |  | A dotted rectangle represents a process step like a basic task or an action that needs to be implemented.                                      |  |
| 3. Web service              |  | A self-contained, modular, distributed, dynamic application that allows different applications to talk each other and share data and services. |  |
| 4. Graph visualization task |  | A step that allows displaying information on one or more graphs.                                                                               |  |
| 5. Map visualization task   |  | A step that allows displaying information on a map.                                                                                            |  |
| 6. Cyclic task              |  | A task that is performed in a cyclic way. It could be useful to specify the criteria.                                                          |  |
| 7. Manual task              |  | A task where a user is prompted to enter information manually.                                                                                 |  |
| 8. Timing task              |  | A task that is performed in a timely way. It could be useful to specify the criteria.                                                          |  |

| SYMBOL                                          | SYMBOL TYPE                                                                         | DESCRIPTION                                                                                                                                         | EXAMPLE                                                                               |
|-------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 9. Purposely-developed algorithm                |    | A rectangle with wrench represents an algorithm that has been designed and developed for the specific purpose.                                      |    |
| 10. Literature-based algorithm                  |    | A rectangle with paper and pencil represents a well-known literature-based algorithm.                                                               |    |
| 11. Customized literature-based algorithm       |    | A rectangle with paper and pencil represents a well-known literature-based algorithm that can be personalized for the specific purpose.             |    |
| 12. HPC task                                    |    | A task that needs High Performance Computing capabilities in order to be performed.                                                                 |    |
| 13. Decision                                    |    | A diamond indicates a decision or a branching point.                                                                                                |    |
| 14. Sequence flow                               |    | An arrow is the connector that shows relationships between the representative shapes.                                                               |    |
| 15. Comment                                     |   | Placed along with context, this symbol adds needed explanation or comments (in grey).                                                               |   |
| 16. Description of the aim                      |  | A brief description of the main objective of the task.                                                                                              |  |
| 17. Input / Output data with a specific format  |  | The icon with the specific format indicates the type of input / output data.                                                                        |  |
| 18. Input / Output data with a different format |  | The general icon for a document (or a group of document) whose format is not listed before. <i>Please, specify the format.</i>                      |  |
| 19. Open data                                   |  | When the input data is open, this icon should be placed along with the input file icon with the specific format. <i>Please, provide reference.</i>  |  |
| 20. Private data                                |  | When the input data is private, this icon should be placed along with the input file icon with the specific format.                                 |  |
| 21. Database                                    |  | A list of information with a standard structure that allows for searching and sorting. It can be open or private.                                   |  |
| 22. Input as output of another workflow         |  | When the input of a task is the output of another workflow, this icon should be placed on the left of the input file icon with the specific format. |  |