Scheduling Tools Series:
Operational Schedules Generator
User Notes
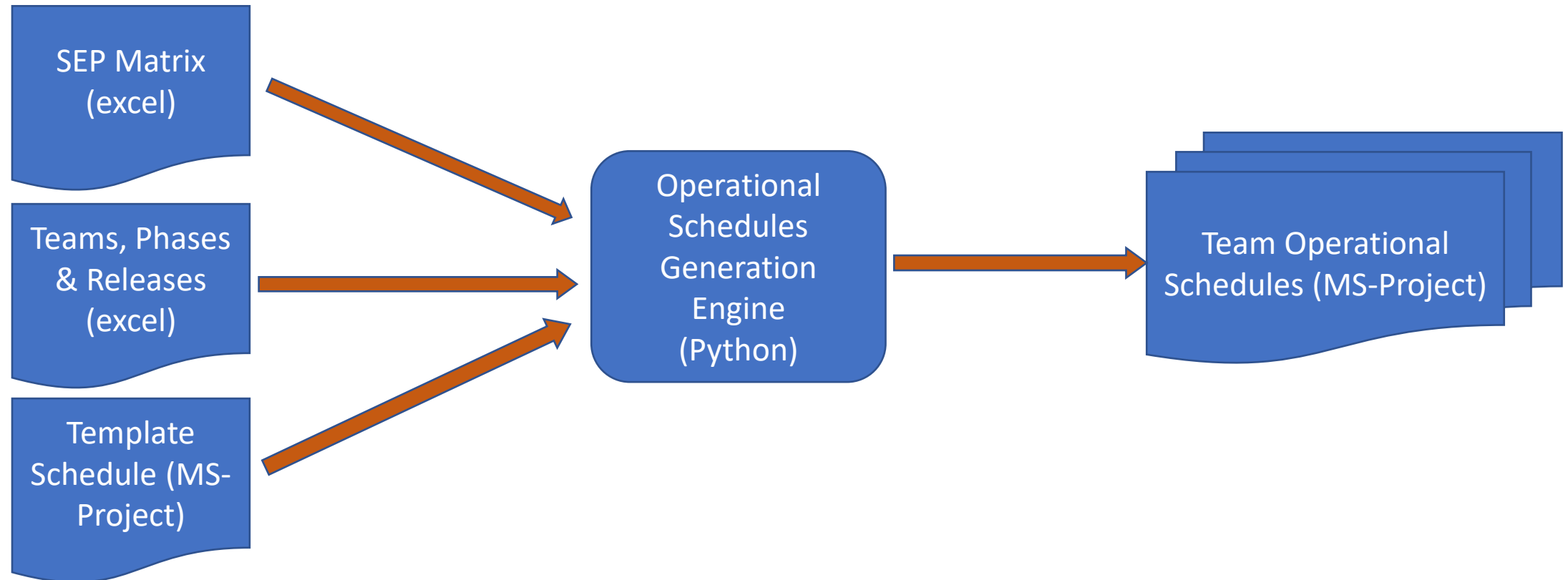
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The Operational Schedules Generator is a set of templates and software modules to generate MS-Project schedules for one or more teams in a project. The engine produces consistent schedules that can be further elaborated depending on the planning and control needs of each Team.
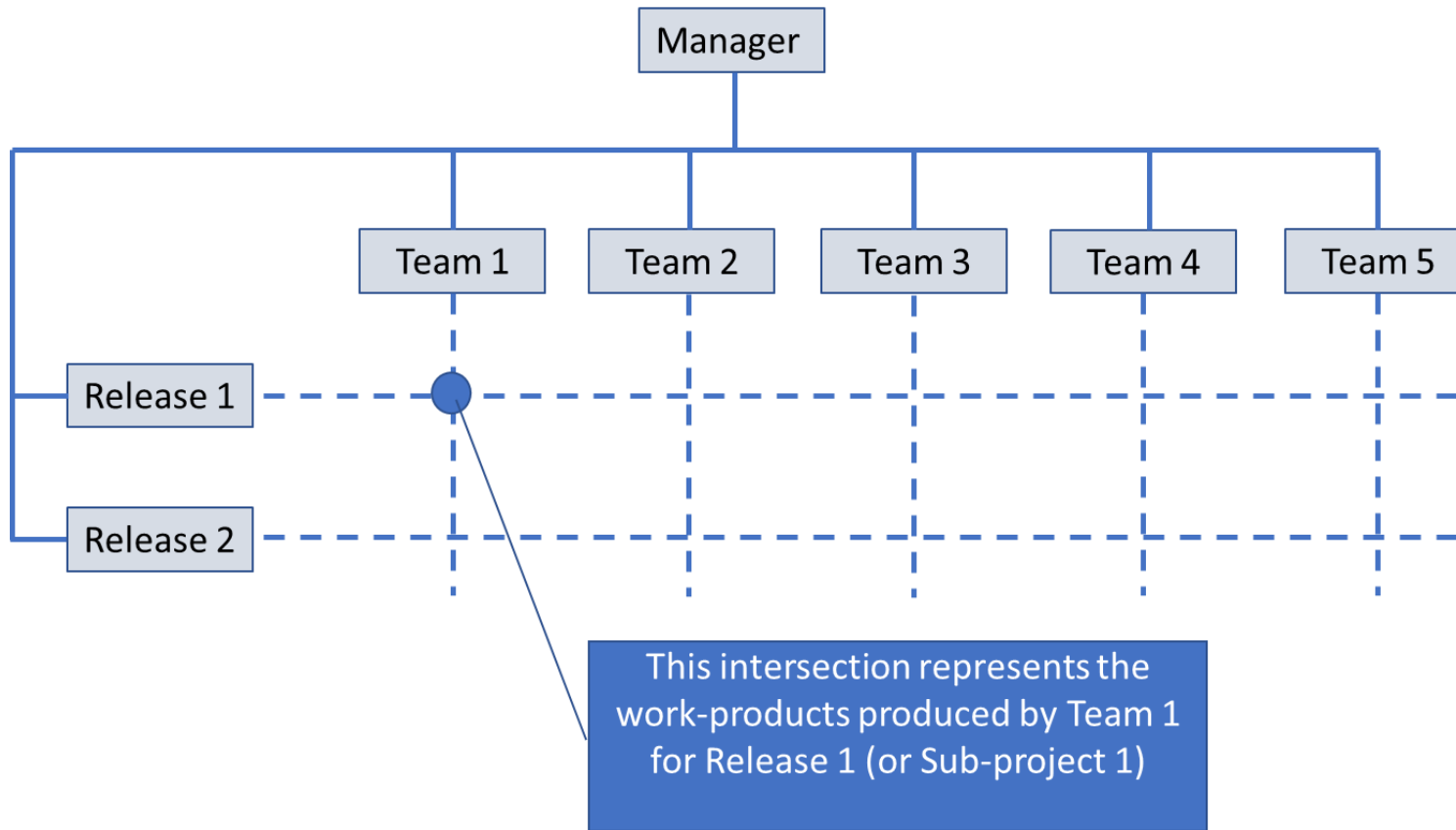
Engine inputs and templates

The engine uses a number of data inputs for which templates are provided. The templates are based on a project

Input	Description	Format
List of workproducts	List of workproducts based on the method or combination of methods selected for the project (e.g. waterfall, agile, package implementation)	Excel. Template provided
List of project phases	Project development cycle phases (e.g. Design, Build, Test, Deployment)	Excel. Template provided
List of Releases or Sub-projects		Excel. Template provided
List of Teams	Technical groups delivering the project workproducts (e.g. Business Analysis, Design, Build, Testing, Training, Deployment)	Excel. Template provided
Template Schedule	Initial base schedule upon which the operational schedule for each team is built	MS-Project. Template provided

Project Organisation

Manager

Team 1 | Team 2 | Team 3 | Team 4 | Team 5

Release 1

Release 2

This intersection represents the work-products produced by Team 1 for Release 1 (or Sub-project 1)

The proposed tool and method is based on a matrix project organization in which Teams are responsible for delivering workproducts to the different Releases or Subprojects in the program.

Solution Engineering Plan (SEP) Matrix

The project's *Solution Engineering Plan (SEP)* describes the overall solution, the method that will be utilized for the implementation, and a list of the work-products that will be required.

The SEP includes a selection of the method that will be used to implement the solution. This method can be waterfall, disciplined agile, package implementation, etc.

A critical component of the Solution Engineering Plan (SEP) is the SEP Matrix that shows the lists of workproducts, the RACI for each of them and their position in the overall plan (e.g. . Release and Phase)

The following table is an example of *SEP Matrix* showing the list of work-products for a project or program.

Release	Phase	Team	Work Product ID	Work Product Name	Responsible	Accountable	Consulted	Informed	Status

Schedule Generator Engine

- The engine is a Python Application that runs under Windows 10.
- It presents a basic GUI to input data and start the actions to process the inputs and produce the required team's schedules.
- The technical inner workings of the engine will be presented in a separate section/document.

Installation and Usage Process

1. Download the Application and Templates into the local PC
2. Study the project to determine:
   a) Teams
   b) Releases
   c) Phases
   d) Workproducts
   e) Default Activities
3. Enter data into the provided templates
4. Start the Application and enter the required filenames and path in the corresponding entry fields
5. Load the initial data by clicking Load SEP
6. Generate the schedules by clicking on 'Generate Operational Schedules'
7. Review results and re-generate if required