Memory and Disk Space Requirements for Large Models

Memory

The memory allocation for the modeling tool by project size:

Project Elements Count (including used projects)		Allocated Memory ²
Earlier versions	2021x and later ¹	
1.5 million	1 million	6GB
2.5 million	2 million	7GB
5 million	3.5 million	11GB

The amount of required memory proportionally increases if working on multiple projects.

The operations that require more memory (1, 2, and 3.5 million of 2021x project elements respectively):

- UPDM migration to UAF 10GB, 10GB, 36GB
- Converting between UAF, DoDAF2, DoDAF, MODAF, NAF, NAF4 frameworks 8GB, 9GB, 13GB
- Project Merge 11GB, 13GB, 21GB³

Disk Space

The recommended disk space for installation and configuration files is 3GB or more depending on used plugins, project type (local or server), and project size. In addition to this, large server projects require extra disk space for configuration files:

Project Elements Count (including used projects)		Disk Space
19.0	2021x	
1.5 million	1 million	6GB
2.5 million	2 million	10GB
5 million	3.5 million	30GB

The amount of required disk space proportionally increases if working on multiple projects.

Note: Element History and Content History features usage requires significantly more disk space due to intensive caching at the client side.

Depending on the feature usage scenario (e.g., retrieving content history from old/distant project versions multiple times), the disk space might increase by up to 100GB.

¹ the project elements count is different due to the profiling data storing metamodel optimized in 2021x (decrease by 40-80% in SysML and UAF projects).

² these memory requirements are indicative and may vary by project specifics.

³ strongly depends on the amount of detected changes between merged versions (in this case, the specified required memory is for merging projects with 1.5k changes in total).