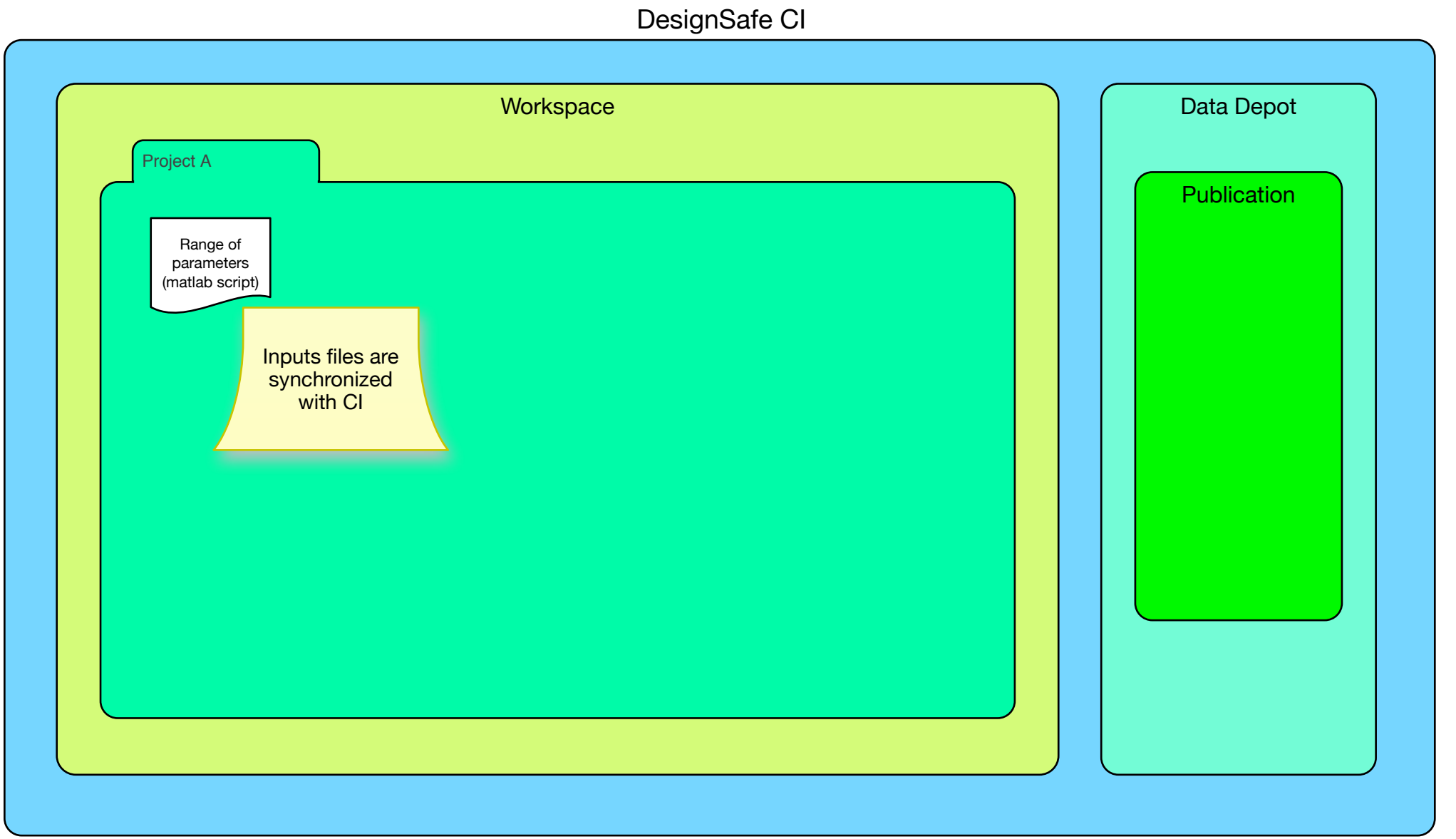
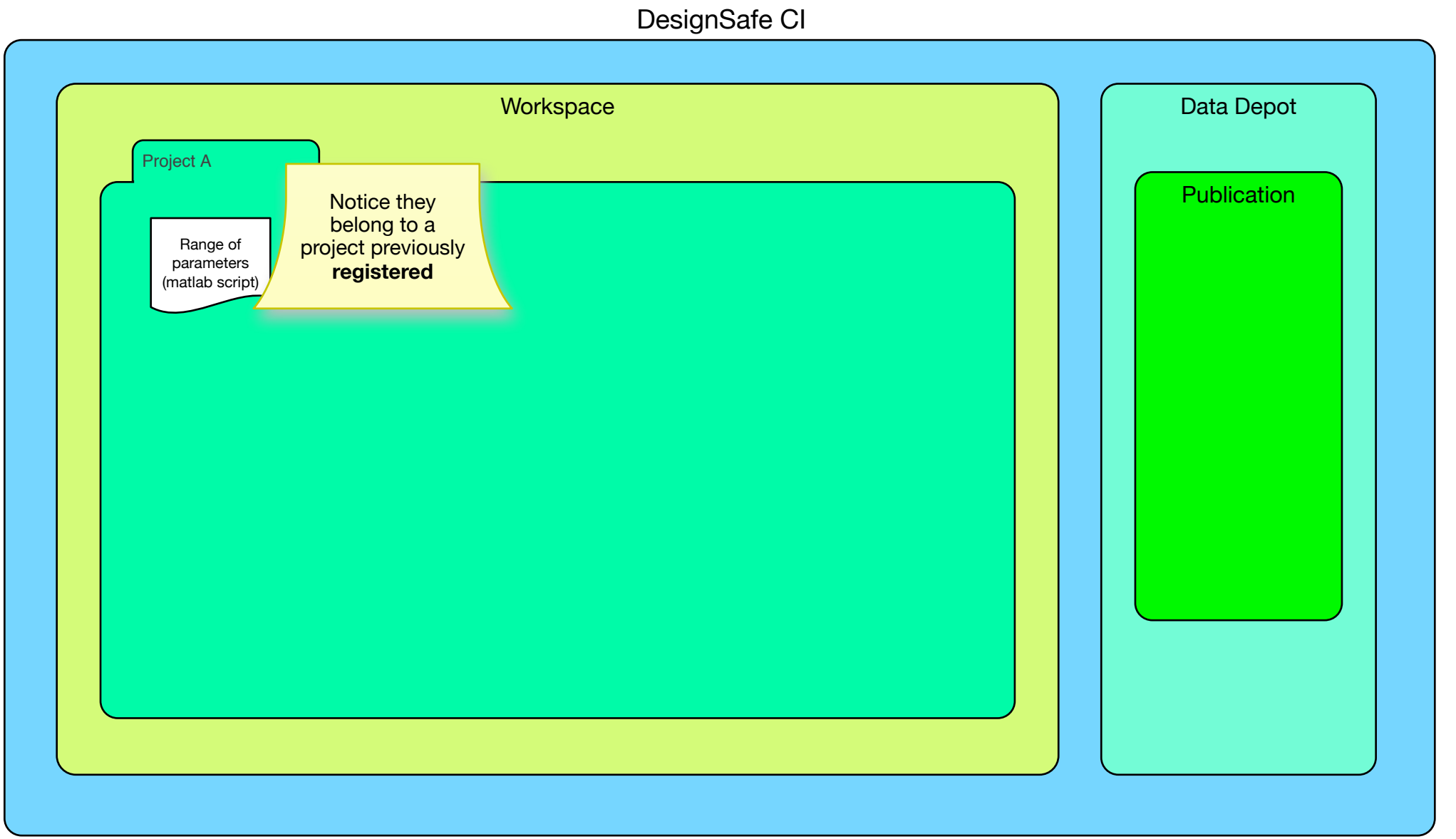
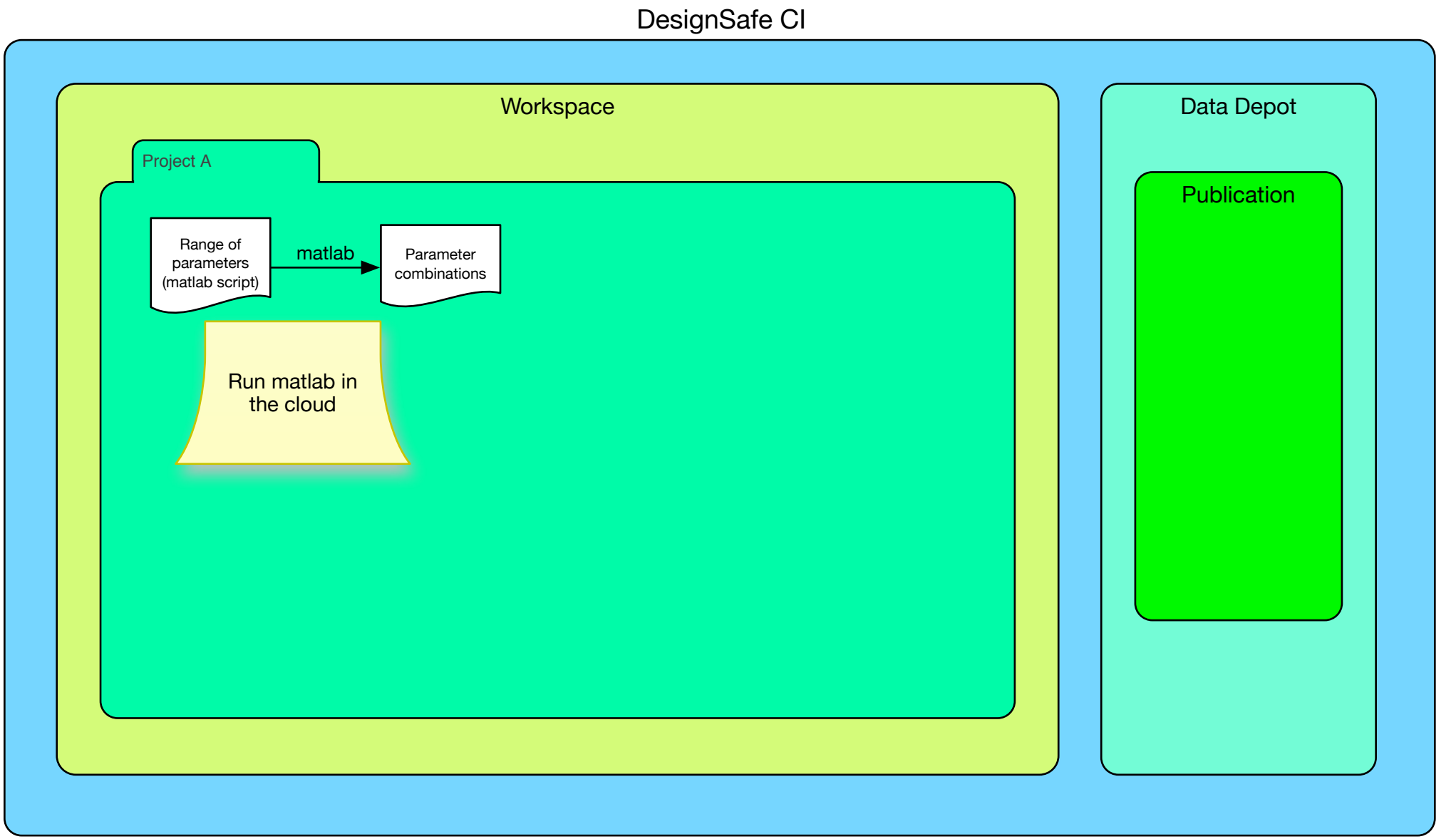
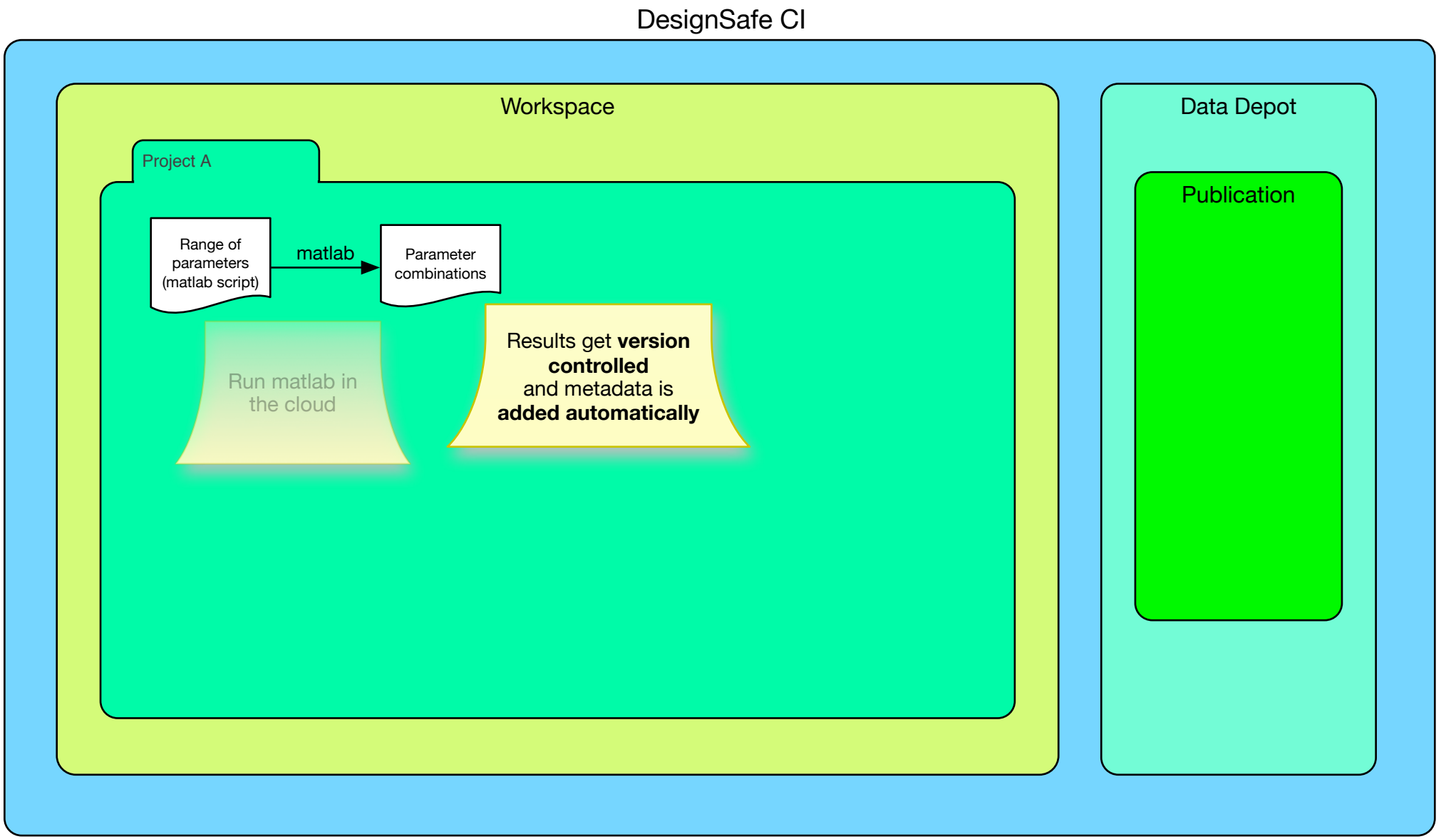
Range of parameters (matlab script)

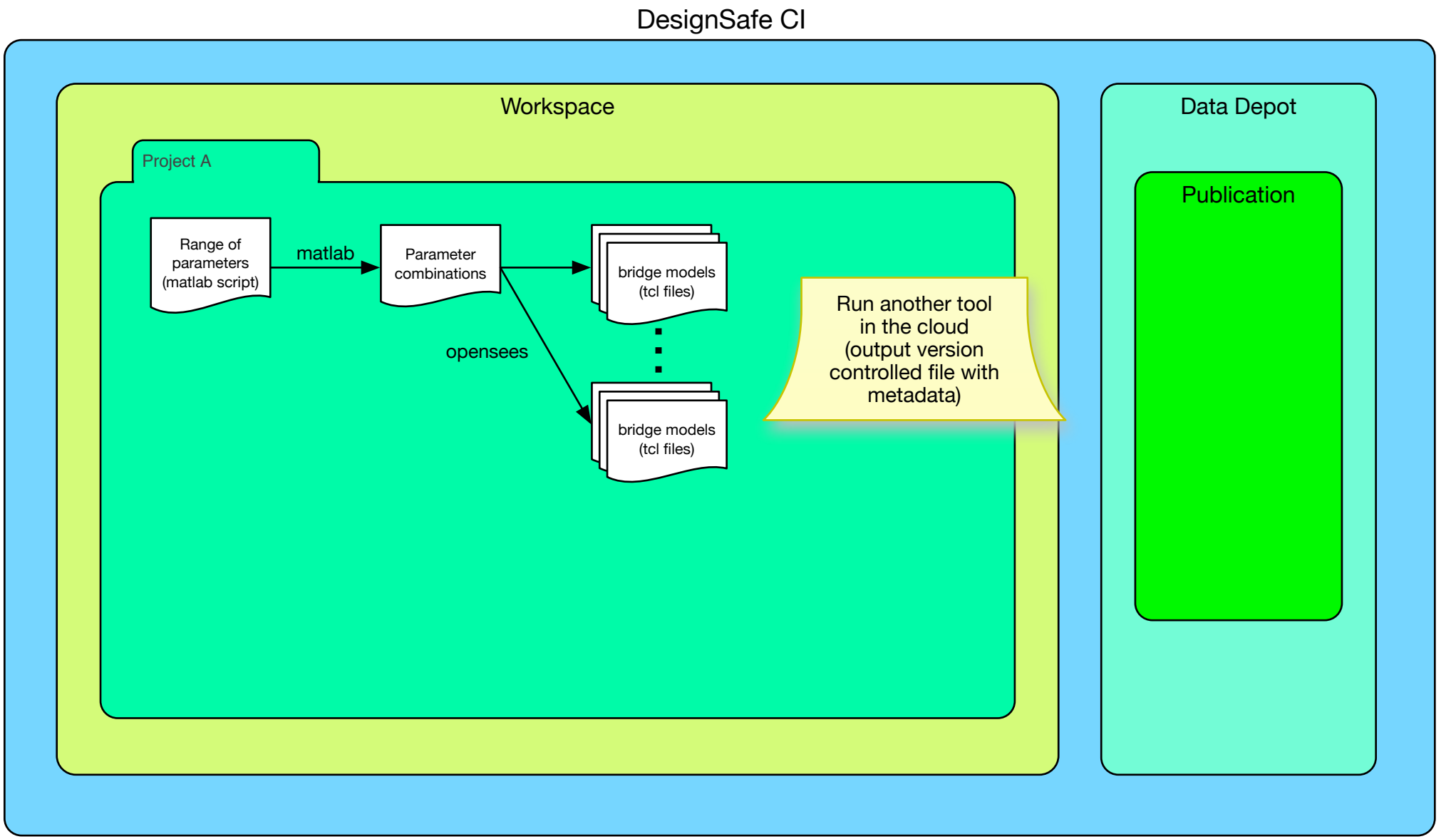
user plans the simulation

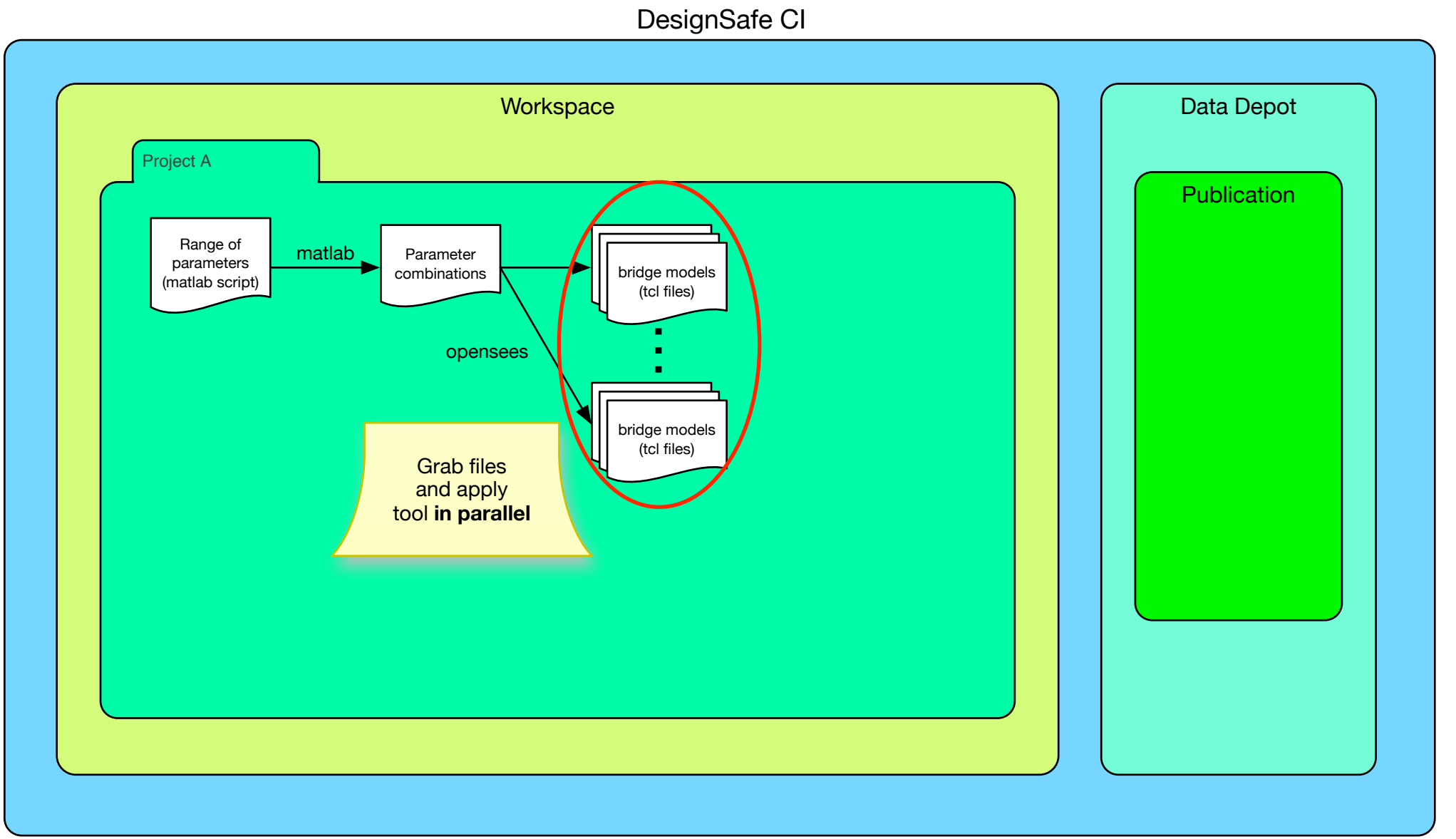

DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
Inputs files are synchronized with CI
Data Depot
Publication

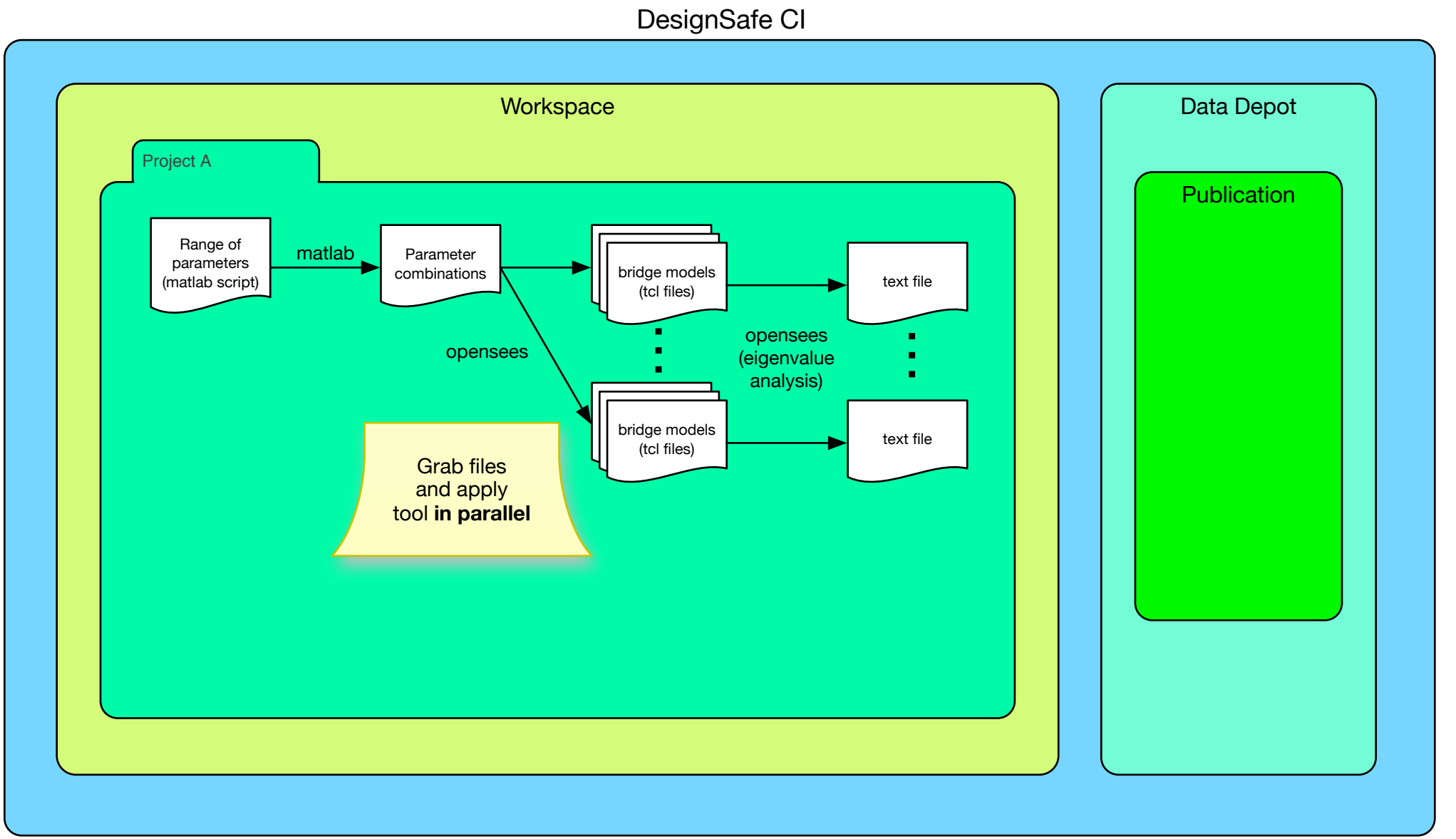

DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
Notice they belong to a project previously **registered**
Data Depot
Publication

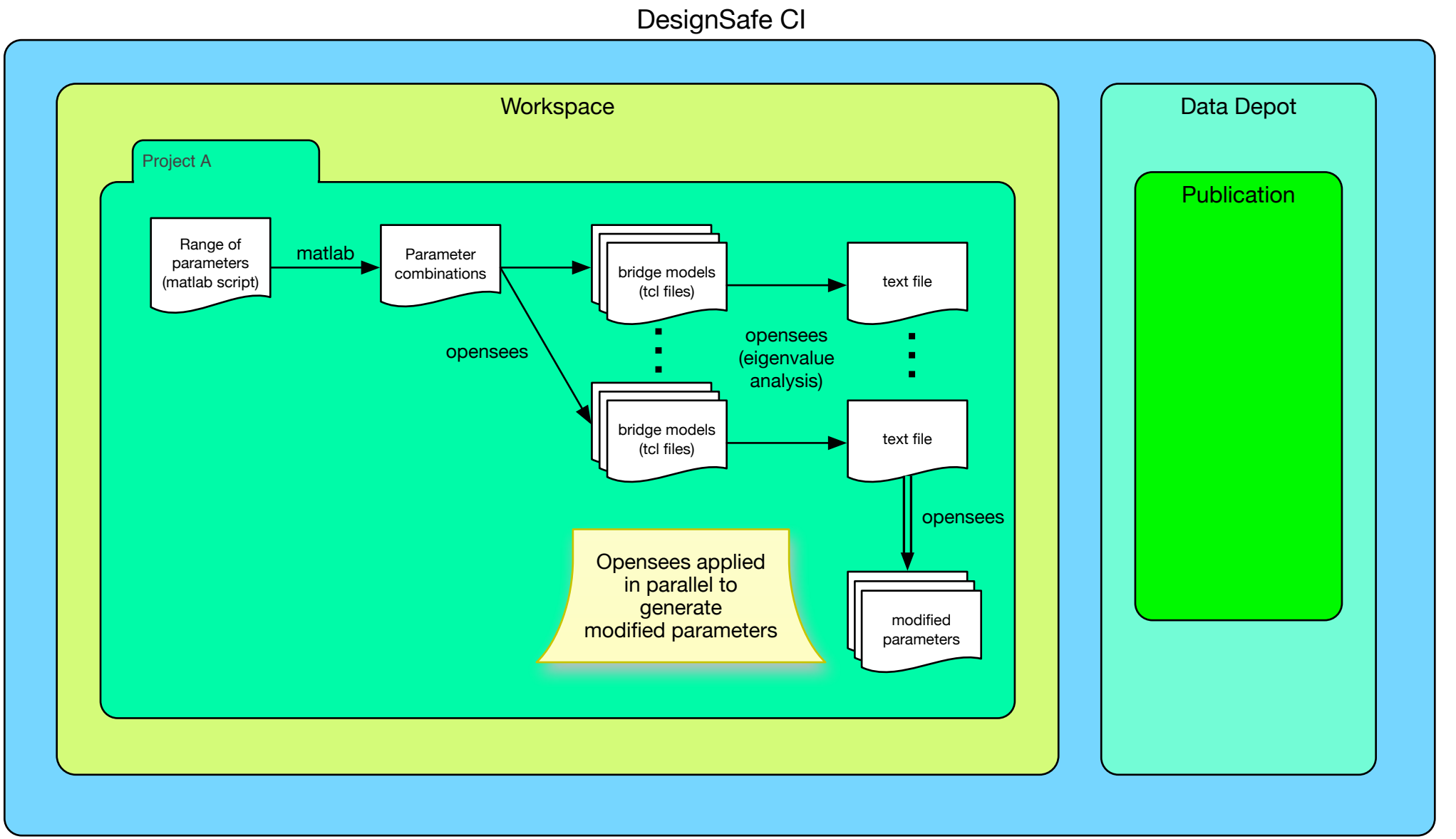

DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
Run matlab in the cloud
Data Depot
Publication

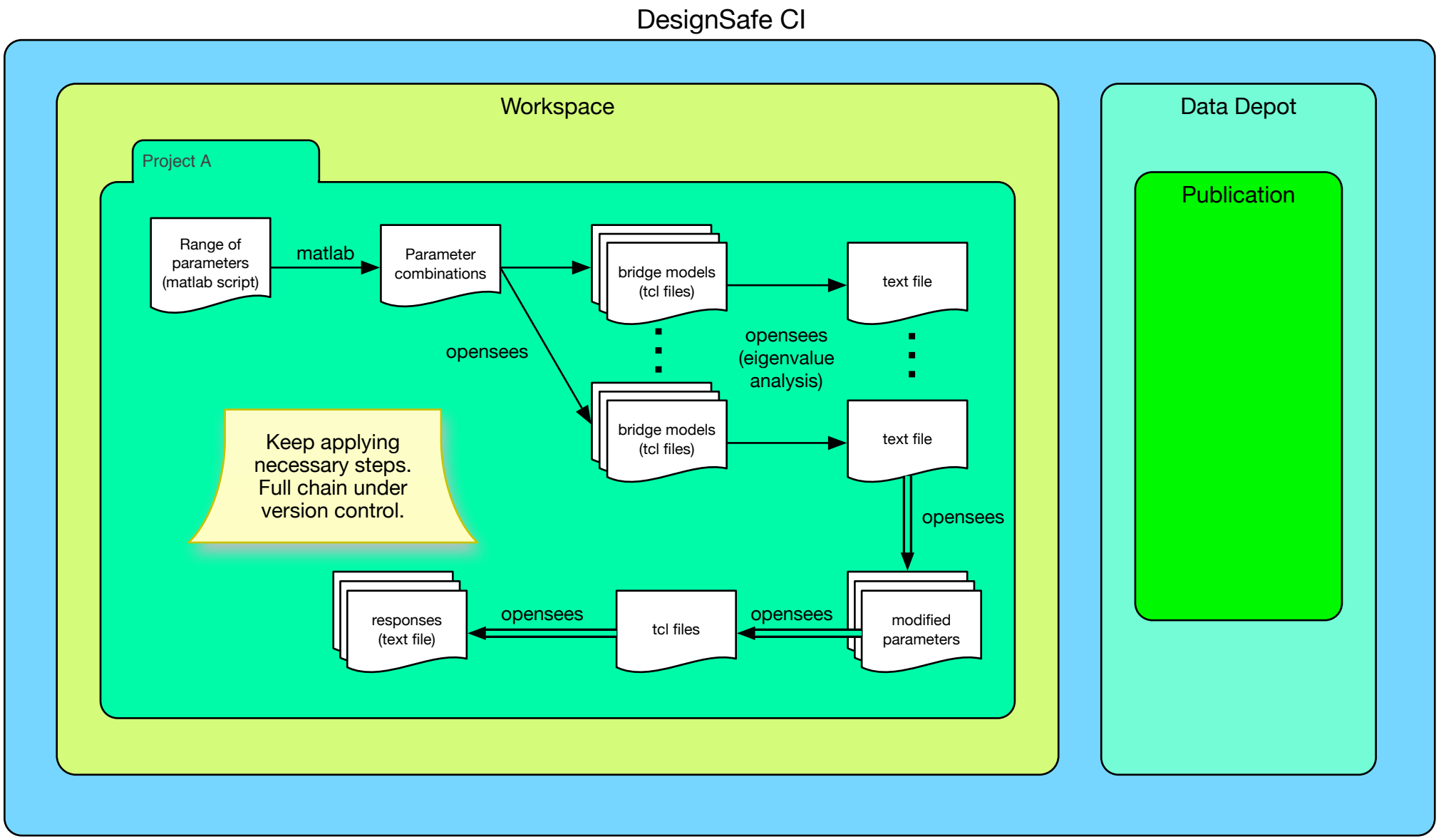

DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
Run matlab in the cloud
Results get **version controlled** and metadata is **added automatically**
Data Depot
Publication

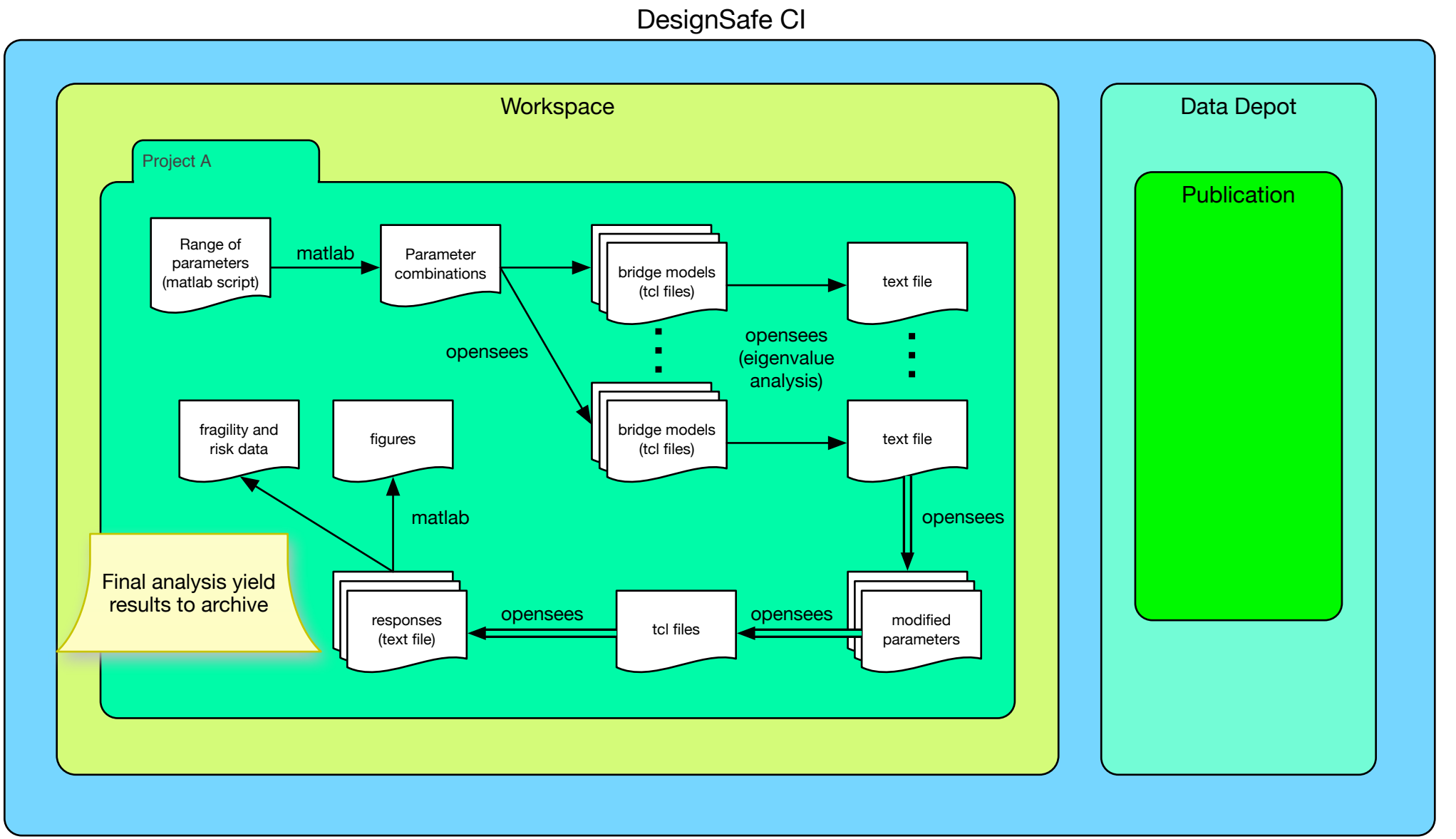

DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
bridge models (tcl files)
opensees
bridge models (tcl files)
Run another tool in the cloud (output version controlled file with metadata)
Data Depot
Publication

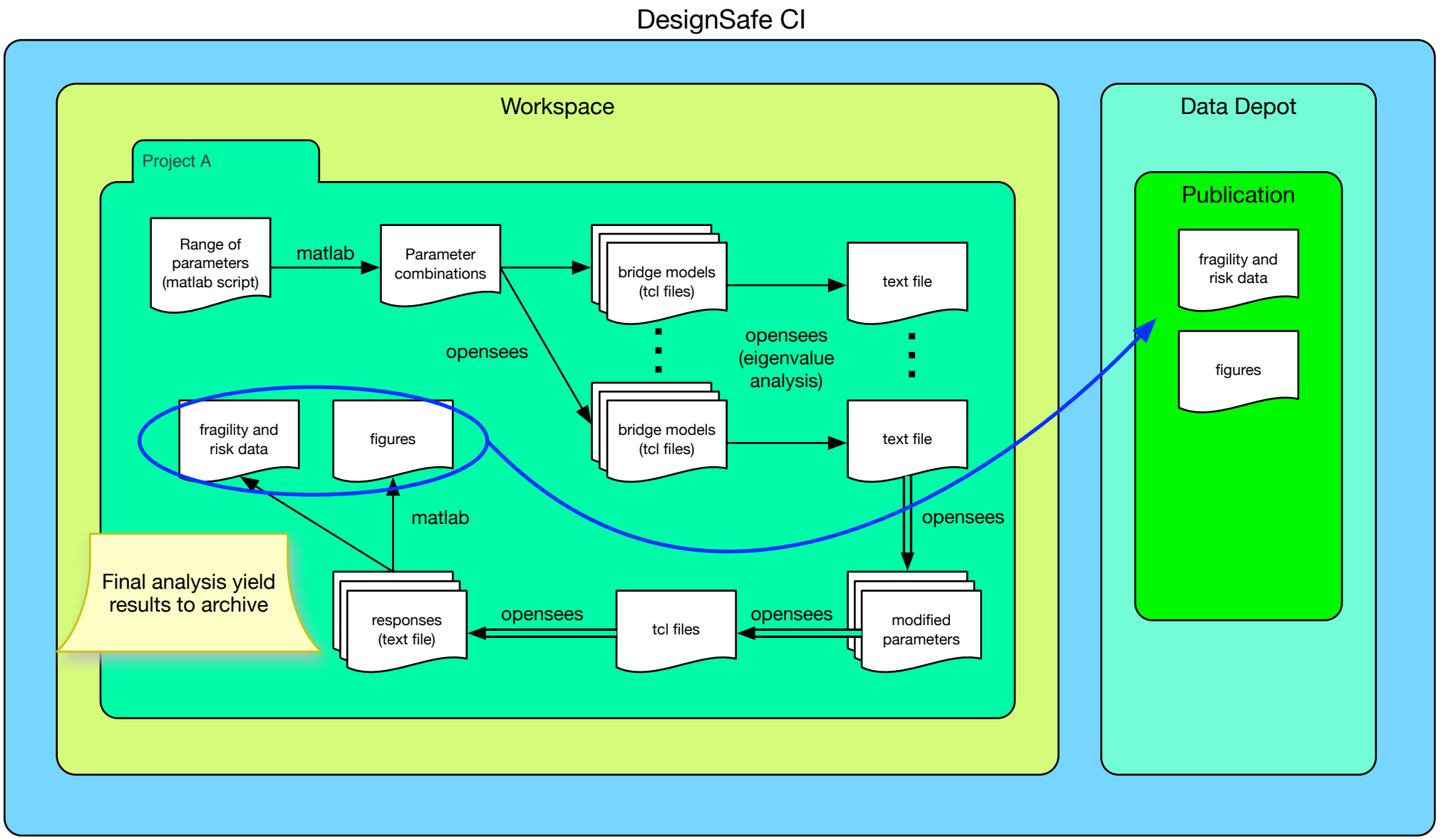

DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
bridge models (tcl files)
opensees
bridge models (tcl files)
Grab files and apply tool in parallel
Data Depot
Publication

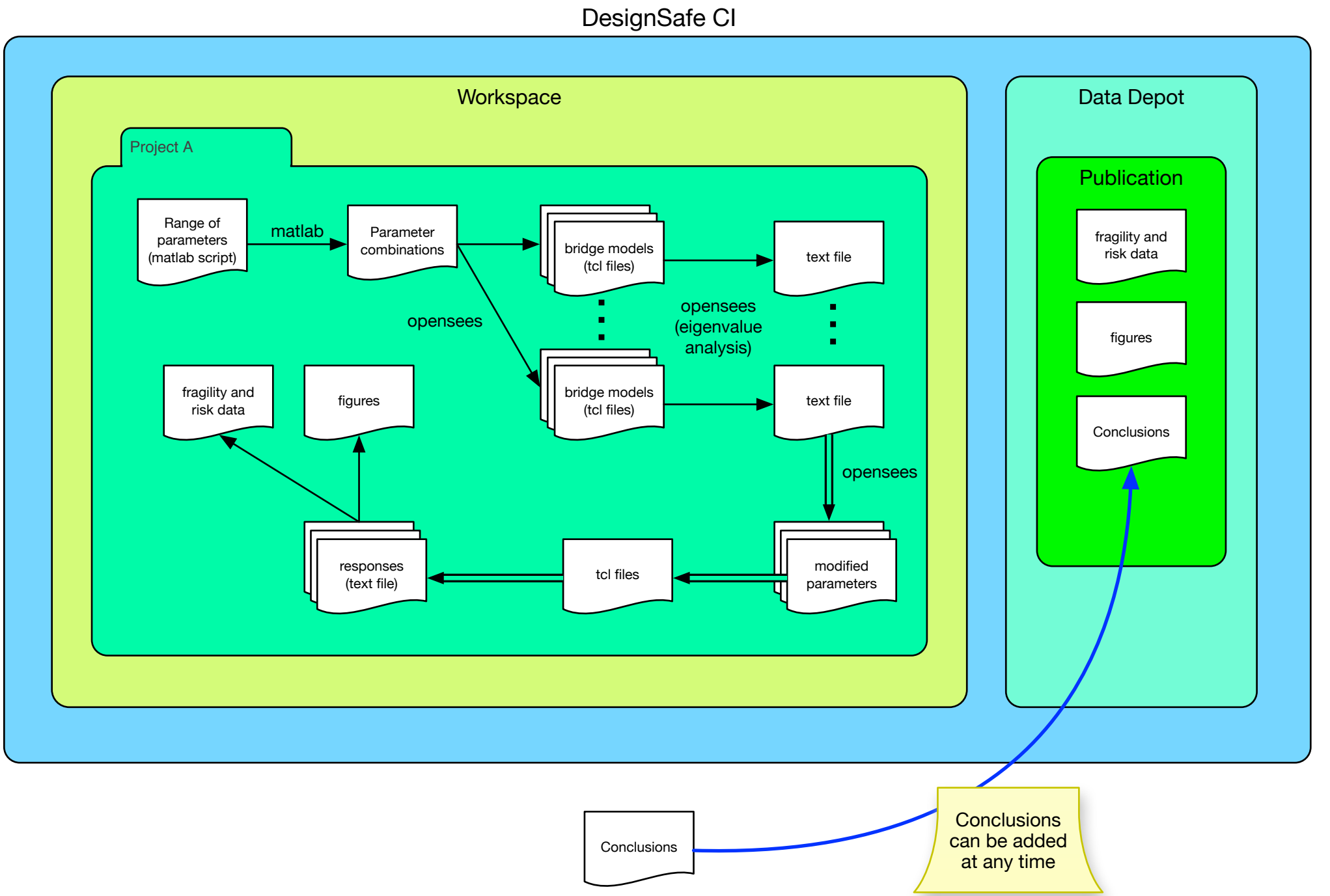

DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
opensees
bridge models (tcl files)
bridge models (tcl files)
text file
text file
opensees (eigenvalue analysis)
Grab files and apply tool in parallel
Data Depot
Publication

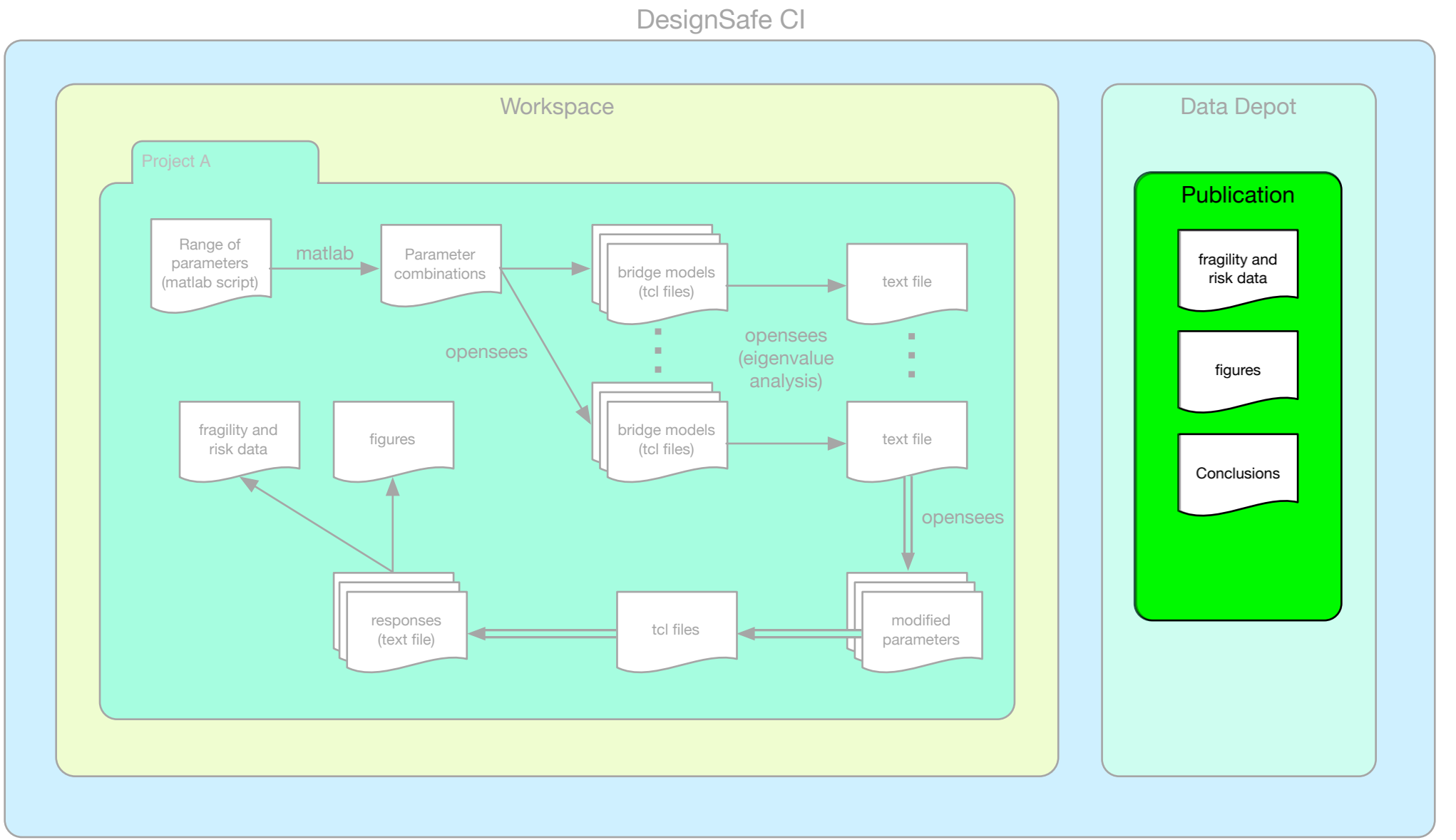

DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
opensees
bridge models (tcl files)
text file
opensees (eigenvalue analysis)
bridge models (tcl files)
text file
opensees
Opensees applied in parallel to generate modified parameters
modified parameters
Data Depot
Publication


DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
bridge models (tcl files)
text file
opensees
opensees (eigenvalue analysis)
bridge models (tcl files)
text file
Keep applying necessary steps. Full chain under version control.
opensees
responses (text file)
opensees
tcl files
opensees
modified parameters
Data Depot
Publication


DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
bridge models (tcl files)
text file
opensees
opensees (eigenvalue analysis)
bridge models (tcl files)
text file
fragility and risk data
figures
matlab
opensees
Final analysis yield results to archive
responses (text file)
opensees
tcl files
opensees
modified parameters
Data Depot
Publication


DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
bridge models (tcl files)
text file
opensees
opensees (eigenvalue analysis)
bridge models (tcl files)
text file
fragility and risk data
figures
matlab
opensees
Final analysis yield results to archive
responses (text file)
opensees
tcl files
opensees
modified parameters
Data Depot
Publication
fragility and risk data
figures


DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
bridge models (tcl files)
text file
opensees
opensees (eigenvalue analysis)
bridge models (tcl files)
text file
fragility and risk data
figures
opensees
responses (text file)
tcl files
modified parameters
Data Depot
Publication
fragility and risk data
figures
Conclusions
Conclusions
Conclusions can be added at any time


DesignSafe CI
Workspace
Project A
Range of parameters (matlab script)
matlab
Parameter combinations
bridge models (tcl files)
text file
opensees
opensees (eigenvalue analysis)
bridge models (tcl files)
text file
fragility and risk data
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opensees
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tcl files
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Conclusions