

		Workflow composition			Performance	Portability		Reproducibility
		Language	Data structures	Interface type	Strategies	Platform independence	Containerized tool compatibility	Provenance format
Neuroimaging workflow engines	Nipype	Python	file-based + primitive types	programming language	checkpointing	yes	none	W3C PROV
	PSOM	MATLAB and GNU/Octave	file-based + primitive types	programming language	checkpointing	yes	none	Custom
	LONI	DSL (XML) w/ GUI	file-based + primitive types	DSL		yes	none	Custom
	SPM	MATLAB w/ GUI	file-based + primitive types	None		yes	none	NIDM-Results
	FastR	Python	file-based + primitive types	DSL		yes	Docker and Singularity	W3C PROV
	AA	MATLAB	file-based + primitive types	DSL	checkpointing	yes	none	Custom
	Pydipper	Python	file-based + primitive types	programming language	checkpointing	yes	none	Custom
Other scientific workflow engines	Taverna	GUI	file-based + primitive types	DSL	checkpointing	yes	none	W3C PROV
	Pegasus	DSL (XML) w/ Java/Python/Perl APIs	file-based + primitive types	DSL	checkpointing	no (Linux and OSX)	Docker and Singularity	Custom
	Make	Shell scripting	file-based + primitive types	programming language	checkpointing	no (OSX and other UNIX-based systems)	none	Custom (limited)
	OpenMOLE	DSL (Scala) w/ GUI	file-based + primitive types	programming language		no (Linux only)	CARE or udocker	Custom
	Nextflow	DSL (Groovy)	file-based + primitive types	None	checkpointing	no (POSIX only)	Docker and Singularity	Custom (limited)
	Galaxy	GUI DSL (CWL)	file-based + primitive types	DSL	checkpointing	yes	Docker	Custom
	Toil	DSL (CWL)	file-based + primitive types	programming language	checkpointing	yes	Docker	Custom (limited)
Big Data frameworks	MapReduce	Java w/ Python API	key-value pair	None	data locality	yes	none	Custom (limited)
	Spark	Scala w/ Java/Python/R APIs	RDD/DataFrame	None	in-memory computing/lazy evaluation/data locality	yes	none	Data lineage
	Dask	Python	Arrays, Bags and DataFrame	None	in-memory computing/lazy evaluation/data locality	yes	none	Data lineage