Available Software in CloudFlow

Software in current use

The following table lists software solutions already in use in the two first waves of experiments. Please note that the level of testing and integration will vary, and the available functionality may be reduced. It is therefore adviced to contact the ISV of CloudFlow competence center to verify that the existing / planned installation is suitable.

ISV	Software	Description	Cloud / HPC
First Wave of Experiments			
Missler	TopSolid	CAD / CAM	Arctur
ITI	System Simulation Service	System simulation of FMUs (FMI for Co-Simulation1.0)	Arctur
Fraunhofer	GridWorker	Software toolkit for parallelization	Arctur
Fraunhofer	RemotePostProcess /WebSciVis	Simulation visualization	Arctur
Sintef	GoTools	Geometry Toolkit	Arctur
Sintef	PointsVsCAD	Quality assurance and CAD visualization	Arctur
Jotne	Express Data Manager EDMopenSimDM EDMtruePLM	Product Lifecycle Management, used across all first wave experiments	Arctur
Second Wave of Experiments			
HELIC	RaptorX	Pre-LVS Electromagnetic Modeling	Arctur
TTS	DDDSimulator	3D simulation and optimization engine	Arctur
SimPlan	SimAssist	Plant Simulation tool	Arctur
Siemens(3rd party)	Siemens PLM	Product lifecycle management	Arctur
CAPVIDIA	FlowVision	CFD simulation	Arctur
AVL	AVL FIRE	CFD Simulation	Arctur
(OpenSource 3rd party)	SnappyHexMesh	mesh generator	UNIZAR + CSUC
(OpenSource 3rd party)	Paraview	Simulation visualization	UNIZAR
(OpenSource 3rd party)	OpenFOAM	CDF solver	UNIZAR + CSUC
(OpenSource 3rd party)	Code_Aster	Thermos-mechanical solver	CSUC

Software available from the Cloud / HPC providers

The following tables lists other relevant software that is available at the Cloud / HPC centers

Available Software at Arctur

ISV	Software	Description
Ansys	Ansysy 16.0	CFD *Subject to individual licensing terms
Open Source	ElemrFEM	FEM
Open Source	OpenFoam	CFD
Open Source	ParaView	Visualization
Open Source	Octave	Numerical simulation and computation

Available Software at CSUC

Open Source:

Life Sciences and Genetics	Computational Chemistry		Statistics	Meteorology and Astronomy	Numerical Methods	Libraries	Visualization
Adun	ABINIT	SIESTA	JAGS	MM5	Code_Aster	ATLAS	Gnuplot
Amber	ADF	Gaussian	Octave	WRF	FDS	BOOST	MOLDEN
Autodock	CFOUR	JAGUAR	R	EPIC	Kratos	FFTW	Molekel
CPMD	CP2K	NWChem		GADGET-2	OpenFOAM	GA	NCL/NCA
DL_POLY	GAMESS	ORCA			Elmer	GSL	ParaView
GROMACS	GPAW	POLYRATE				HDF5	XCrysDen
NAMD	MOPAC	SAPT				MKL	
LAMMPS	Open Babel					NetCDF	
RAxML	pDynamo					PETSc	
	QuantumEspresso					ScaLAPACK	
	TURBO-						
	Mole					Trilinos	

User License required:

Life Sciences and Genetics	Computational Chemistry	Statistics	Meteorology and Astronomy	Numerical Methods	
CHARMM	CRYSTAL	STATA	ROMS	Fluent	COMSOL
Qdyn	FHI-AIMS			STAR-	LS-DYNA
	MOLCAS			CCM+	NX
	Molpro			VORCAT	Nastran
	VASP			ABAQUS	ESI Suite
				AMESim	META
				ANSA	RadThem
				ANSYS	