



**Release 2022 R1 Highlights**  
**Ansys Licensing**

# Licensing Updates – 2022 R1 Release

## License Generation

- Extended self-serve licensing to Channel Partner customers

## Licensing Portal

- Customer-visible service alerts
- Updated reporting with sort and filter functionality

## Migrations to Ansys Licensing

- AGI Missions products
- Phoenix ModelCenter products

## Product-related changes

- Fluids (Fluent)
- Optical (Speos)
- Autonomy (VRXPERIENCE and AVXCELERATE)

## Elastic Licensing

- Improved robustness and status reporting
- Additional product support
  - ANSYS optiSLang Enterprise
  - ANSYS Discovery Simulation

# Licensing Portal

# Customer-visible service alerts

Banners at top of Licensing Portal

- Planned and unplanned outages
- Service degradations

The screenshot shows the Ansys Licensing Portal interface. At the top, a blue banner displays a "Planned Maintenance" alert for Elastic Licensing and FlexNet Publisher Licensing, with a "See More" button. Below the banner is the Ansys logo and the text "Licensing Portal". To the right is a "Customer Number (Customer Name)" dropdown menu. A yellow banner below the header reads "Entitlements > Elastic Licensing" and includes a message: "Too many customers found. Filter by customer number or name." The left sidebar contains sections for "Entitlements" (Leases/Perpetuals, Elastic Licensing), "Settings" (Licensing Portal Access), and "Messages" (Emails, Alerts). A red arrow points from the "See More" button to a red box labeled "Click for details". Another red arrow points from the "Banners at top of Licensing Portal" text to the maintenance banner.

Click for details

# Updated reporting with sort and filter functionality

Click on arrows to sort, ascending or descending

Click on filter icons to limit what is shown

Transactions > Usage Transactions

Last received transaction: 2021-11-18 15:41:54 (refresh) ⓘ Transactions may be delayed by up to 30 minutes.

From: Nov 14 2021 To: Nov 18 2021

Active Sessions

Export as csv file

Clear Filters

Items per page: 25 1 - 25 of 389

Start Time	End Time	Product	Count	Hours	Cost	Currency
2021-11-17 14:17:56	2021-11-17 17:49:54	ANSYS HPC	996	3.53	309.4	AE
2021-11-17 14:17:57	2021-11-17 17:04:54	ANSYS HPC	6	2.78	11.5	AE
2021-11-17 14:19:36	2021-11-17 16:34:55	ANSYS CFD Enterprise Solver	1	2.26	14	AE
2021-11-17 14:01:37	2021-11-17 16:01:42	ANSYS Mechanical Enterprise Solver	1	2	16	AE
2021-11-17 14:01:39	2021-11-17 16:01:42	ANSYS HPC	996	2	204	AE

Cost Filter

Search...

Select All

0.1

0.2

0.3

Apply

Clear

Cancel

# AGI Migration to Ansys Licensing



# STK Product Consolidation

Legacy Products	Description	STK Pro	STK Premium (Space)	STK Premium (Air)	STK Enterprise
STK Pro	Foundational modeling and simulation software for aerospace & defense mission engineering and systems analysis	✓	✓	✓	✓
STK Integration	Enables direct integration and automation of STK with other software applications (MATLAB/Python/etc)	✓	✓	✓	✓
STK Analysis Workbench	Enables users to create custom functions and calculations relative to times, positions, and reference frames in STK	✓	✓	✓	✓
STK Coverage	Analyze and visualize your system performance anywhere in a user-defined coverage grid	✓	✓	✓	✓
STK Comm/Radar	Adds RF and Optical communications and radar systems to your STK modeling and analysis	✓	✓	✓	✓
STK TIREM	Enables calculation of RF propagation losses over irregular terrain and seawater, including non-line-of-sight effects	✓	✓	✓	✓
STK Urban Propagation	Enables diffracted path loss analysis in urban environments	✓	✓	✓	✓
STK Engine + 1 Runtime	A software development kit (SDK) that enables custom STK application development & 1 deployment license (for internal use only)	✓	✓	✓	✓
STK Analyzer/Optimizer	Adds the capabilities of Model Center® to STK, enabling advanced, automated trade studies and parametric analyses		✓	✓	✓
STK Parallel Computing	Scale calculations from 8 (default) to 16 cores to increase compute performance for resource intensive applications of STK		✓	✓	✓
STK EOIR	Adds EOIR sensor performance modeling to STK		✓	✓	✓
STK Real-Time Tracking Technology (RT3)	Display and analyze real-time data feeds in STK		✓	✓	✓
STK Distributed Simulation (DSIM)	IEEE-compliant DIS and HLA interfaces for STK		✓	✓	✓
STK Astrogator	Adds advanced spacecraft trajectory modeling and maneuver planning capabilities to STK		✓		✓
STK SatPro	Adds advanced orbit modeling tools for satellite mission design and operation		✓		✓
STK Conjunction Analysis Tool (CAT)	Enables rapid identification and analysis of space object conjunctions		✓		✓
STK Space Environment Effects Tool (SEET)	Adds space environment variables (radiation, charged particles, thermal, etc.) to your orbit modeling & analysis		✓		✓
STK Aviator	Adds advanced aircraft performance and propulsion models, maneuver profiles, and flight procedures to STK			✓	✓
STK Aviator Pro	Extends STK Aviator by adding advanced maneuvers that dynamically respond to other aircraft, enabling air combat simulation			✓	✓
Moxie	Moxie uniquely facilitates execution of SysML behavioral models in the mission environment				✓
STK Data Federate (SDF)	A web-based, enterprise Content Management System (CMS) for STK				✓
Test & Evaluation Tool Kit (TETK)	Improve the efficiency and effectiveness of test and evaluation activities across the digital engineering product lifecycle				✓

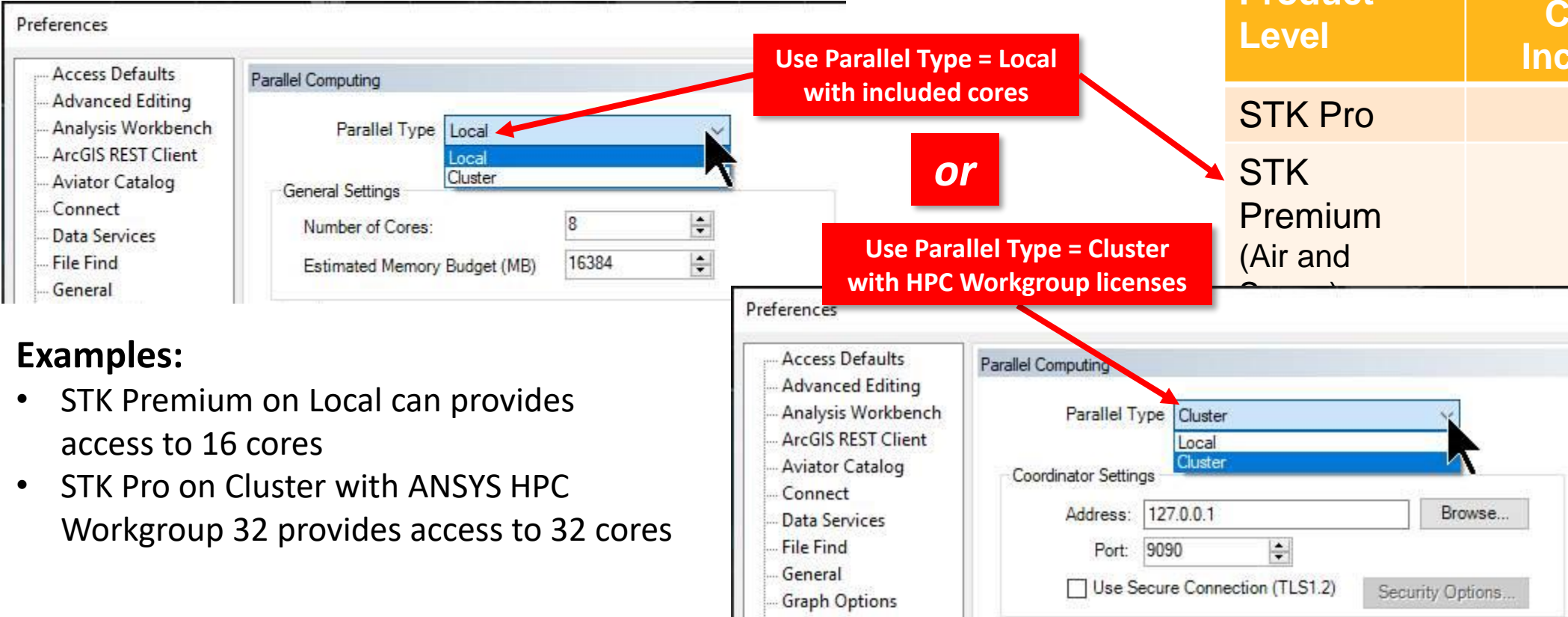
# New License Features

Product	Feature Name/License Increments	Feature Description	Count
Ansys STK Pro	stk_mission_level1	STK Pro core and RF capabilities	1
	stk_engine_runtime	STK Engine runtime	1
Ansys STK Premium Air	stk_mission_level1	STK Pro core and RF capabilities	1
	stk_mission_level2	STK Premium core capabilities	1
	stk_mission_air	Advanced air capabilities	1
	stk_engine_runtime	STK Engine runtime	1
	stk_mission_level1	STK Pro core and RF capabilities	1
Ansys STK Premium Space	stk_mission_level2	STK Premium core capabilities	1
	stk_mission_space	Advanced space capabilities	1
	stk_engine_runtime	STK Engine runtime	1
	stk_mission_level1	STK Pro core and RF capabilities	1
Ansys STK Enterprise	stk_mission_level2	STK Premium core capabilities	1
	stk_mission_level3	Moxie, GCS, SDF, & TETK	1
	stk_mission_space	Advanced space capabilities	1
	stk_mission_air	Advanced air capabilities	1
	stk_engine_runtime	STK Engine runtime	1
	odtk_level1	Core OD capabilities	1
Ansys ODTK	odtk_level2	Advanced OD capabilities	1
Ansys STK Scheduler	stk_scheduler	Scheduler	1
Ansys Moxie (Legacy)	moxie_sysml	Moxie	1
Ansys STK Geospatial Content Server	stk_geoserver	Geospatial Content Server	2
Ansys STK Geospatial Data	stk_geodata	Geospatial Data	1
Ansys STK Data Federate	stk_data_federate	STK Data Federate	1
Ansys STK Engine Runtime	stk_engine_runtime	STK Engine runtime	1
Ansys STK USGov	stk_usgov	US Government propagator	1
Ansys STK Satellite Constellation	stk_satcollection	Large Constellation Object (beta)	1
Ansys STK SNOPT	stk_snopt	SNOPT Optimizer	1
Ansys STK SOLIS	stk_solis	Flight software simulation	1
Ansys STK Missile Tool Kit	stk_missiles	Missile modeling	1
Ansys ODSSA	odtk_manuever	Orbit manuever processing	1
Ansys STK FlightNav	stkflt_restricted	Specialized flight procedures	1



# Parallel computing uses HPC Workgroups

- Legacy STK Parallel Computing products replaced by ANSYS HPC Workgroups
- HPC Workgroups cannot be used with Local cores



Product Level	HPC Local Cores Included
STK Pro	8
STK Premium (Air and	16
	16

**Examples:**

- STK Premium on Local can provides access to 16 cores
- STK Pro on Cluster with ANSYS HPC Workgroup 32 provides access to 32 cores

# **ModelCenter Migration to Ansys Licensing**

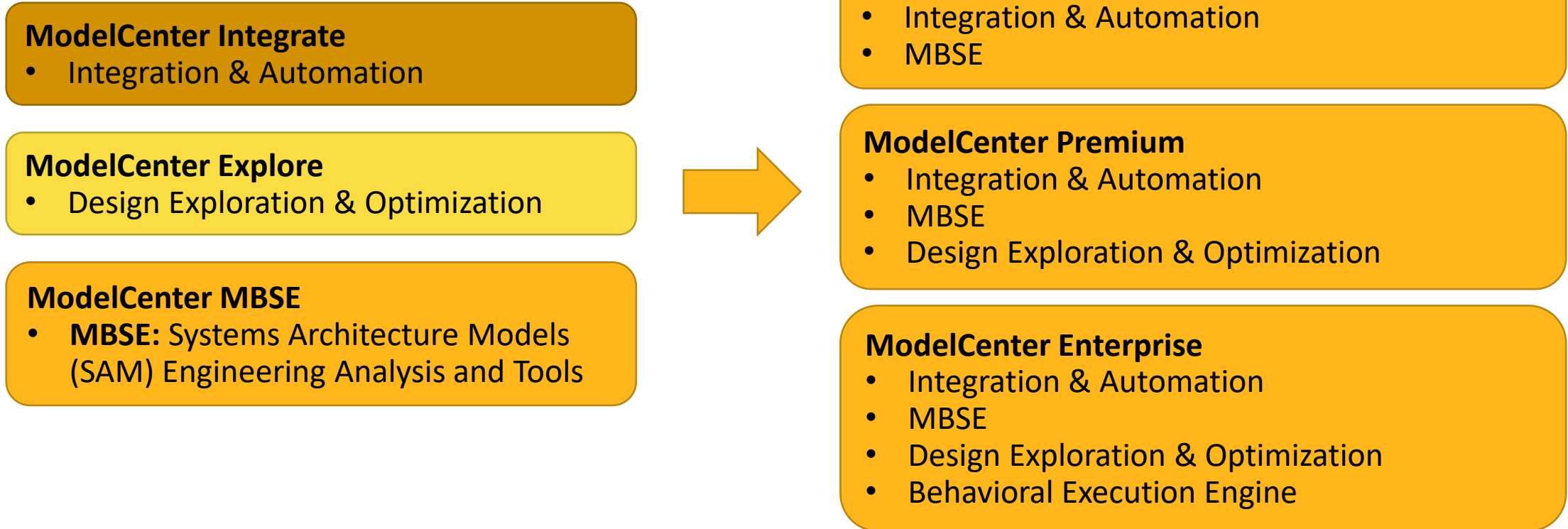


# Migration from Phoenix Integration to Ansys Licensing

- With the release of 2022 R1, ModelCenter licensing will utilize the Ansys License Manager for:
  - New customers
  - Existing customers who transition to the new 2022 R1 packaging
- Licenses for existing customers ***who do not transition to the 2022 R1 packaging*** will remain on the legacy ModelCenter License Manager.
  - Some customers will receive two license keys, one from each system, as we transition to the new packaging.

# ModelCenter Repackaging

- ModelCenter product structure will be changing in 2022 R1



# ModelCenter Repackaging Details

Product Capability	Pro	Premium	Enterprise	Separate Modules
Integration	●	●	●	
MBSE	●	●	●	
Remote Execution*	2	2	4	
Simultaneous Workflow Execution (SWE)**	4	8	16	
Exploration		●	●	
Behavioral Execution Engine			●	
MBSE SAM Connectors	-	-	-	●
Remote Execution Pak (4)	-	-	-	●
Binary File Reader	-	-	-	●

\*Number of remote access points to run portions of ModelCenter workflows on remote machines

\*\*Number of ModelCenter workflows that can be run simultaneously (whole workflow)

# ModelCenter License Features

Product	Feature Name	Feature Description
ModelCenter	MC_Level1	ModelCenter Pro
	MC_Level2	ModelCenter Premium
	MC_Level3	ModelCenter Enterprise
	MC_NorthAmerica	Advanced Optimization algorithms (North America only)
	MC_BinaryCAE	QuickWrap Binary File Support
	MC_RunOnly	ModelCenter Run Only
ModelCenter Remote Execution	MC_RemoteExecution	ModelCenter Remote Execution
ModelCenter Simultaneous Workflow Execution	MC_SimultaneousWorkflowExecution	ModelCenter Simultaneous Workflow Execution
CATIA V5 Plug-in	capricatv5	ModelCenter Plug-in for CATIA V5
NX Plug-in	piug	ModelCenter Plug-in for NX
Creo Plug-in	piproe	ModelCenter Plug-in for Creo
Solidworks Plug-in	pisolwor	ModelCenter Plug-in for Solidworks
ModelCenter Cloud	MC_CloudServer	ModelCenter Cloud Server
	MC_CloudWorkflowExecution	ModelCenter Cloud Simultaneous Workflow Execution

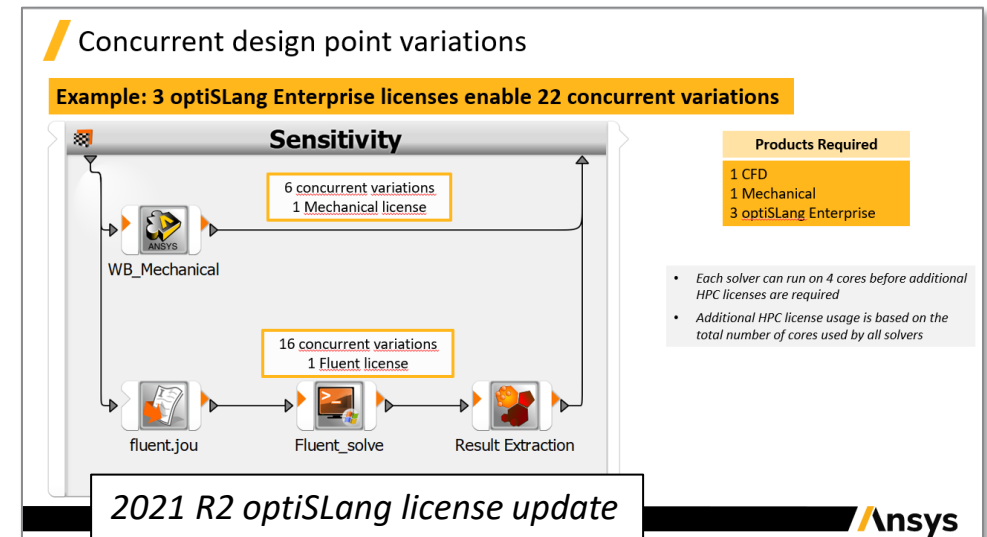
# Fluids

# Improved Fluent license sharing



- When SpaceClaim or Discovery Modeling is using a CFD PrepPost license and Fluent is launched from the toolbar, the license is now shared with Fluent, allowing SpaceClaim/Discovery Modeler and Fluent Meshing to run simultaneously with a single license

- Ansys Fluent run from optiSLang now supports the concurrent parametric variations introduced in 2021 R2 with optiSLang Premium and optiSLang Enterprise licenses
  - This was also available as a Fluent service pack for the 2021 R2 release





# Fluent multi-GPU solver licensing\*

- The Fluent GPU solver is available in 2022 R1 as a beta capability
- A CFD Enterprise license is required to use the Fluent GPU solver
- Running on a single GPU is included
  - I.e., no additional HPC licenses are required
- Each subsequent GPU requires 64 HPC tasks
  - 4 HPC tasks are included with CFD Enterprise, so 60 additional HPC tasks are required to enable the 2<sup>nd</sup> GPU, then 64 further HPC tasks for the 3<sup>rd</sup> GPU, etc.

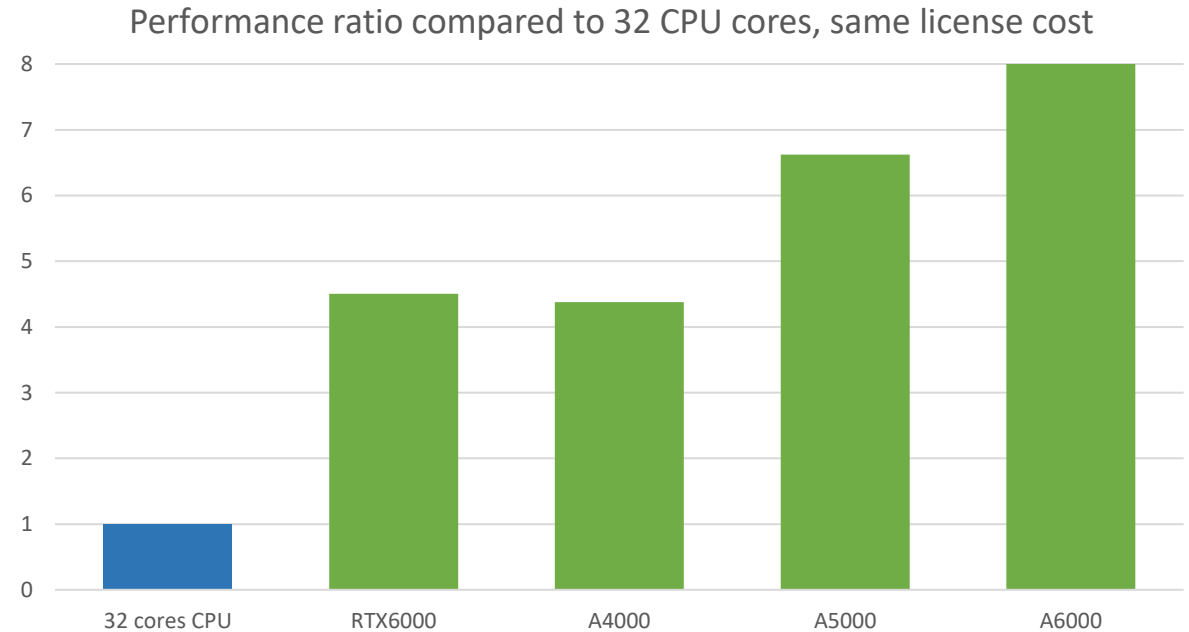
# GPUs	Number of HPC Licenses	
	Workgroup tasks	HPC Packs
1	0	0
2	60	3
3	124	3
4	188	4
5	252	4
6	316	4
7	380	4
8	444	4

*\*Fluent GPU solver is a Beta capability in 2022 R1*

**Optical**

# Speos GPU solver\*

- Speos GPU compute requires
  - **1 Speos Solver**
  - **32 Optix HPC Cores per GPU**
- Higher GPU performance = better license performance/\$
- Optimized for Nvidia RTX
- GPU management in Speos :
  - Multi GPU capable
  - Select which GPU(s) to use



*\*Speos GPU is a Beta capability in 2022 R1. Its licensing behavior may change in future releases.*

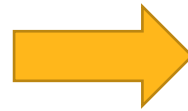
**Autonomy**

# Migration from VRXPERIENCE to AVXCELERATE

- VRXPERIENCE Headlamp and Sensors products replaced by new AVXCELERATE ones
- Previous license increments discontinued and replaced by new ones
- All product functionality remains

## VRXPERIENCE 2021 R2 and earlier

- VRXPERIENCE Headlamp Pro
- VRXPERIENCE Headlamp Premium
- VRXPERIENCE Sensors Pro
- VRXPERIENCE Sensors Premium
- VRXPERIENCE Sensors RT Radar



## AVXCELERATE 2022 R1

- AVXCELERATE PrepPost
- AVXCELERATE Solve
- AVXCELERATE Optical Camera add-on
- AVXCELERATE Lidar add-on
- AVXCELERATE Radar add-on
- AVXCELERATE Headlamp Add-on
- AVXCELERATE Driver View Add-on
- AVXCELERATE Sensor add-on Workgroup X

### Important Notes:

- For use of VRXPERIENCE 2021 R2 or earlier, contact your Ansys sales representative
- No impact on VRXPERIENCE HMI, MRO, Light, and PQ products and applications

# License features for VRXPERIENCE vs AVXCELERATE

## VRXPERIENCE 2021 R2 and earlier

- VRXPERIENCE Headlamp Pro
  - avrxp\_hl\_level1
- VRXPERIENCE Headlamp Premium
  - avrxp\_hl\_level1
  - avrxp\_hl\_level2
  - avrxp\_deploy
  - 2 avrxp\_deploy
- VRXPERIENCE Sensors Pro
  - avrxp\_ss\_level1
  - avrxp\_ls\_solver
  - vrx\_rtradar\_solve
  - avrxp\_deploy
- VRXPERIENCE Sensors Premium
  - avrxp\_ss\_level1
  - avrxp\_ss\_level2
  - avrxp\_ls\_solver
  - vrx\_rtradar\_solve
  - 2 x avrxp\_deploy

## AVXCELERATE 2022 R1

- AVXCELERATE Preppost
  - vrx\_preppost
- AVXCELERATE Solve
  - vrx\_solve
  - vrx\_rtradar\_solve
- AVXCELERATE Optical Camera add-on
  - vrx\_rtcam\_gpu
- AVXCELERATE LiDAR add-on
  - vrx\_rtlidar\_gpu
- AVXCELERATE Radar add-on
  - vrx\_rtradar\_gpu
- AVXCELERATE Headlamp Add-on
  - vrx\_smartheadlamp
- AVXCELERATE Driver View Add-on
  - vrx\_rtdriverview\_gpu

# Bundle and workgroup for AVXCELERATE

## AVXCELERATE Premium

Prep/post

Solve

Headlamp add-on

Driver view add-on

## AVXCELERATE Enterprise

Prep/post

Solve

Headlamp add-on

Driver view add-on

Optical Camera

Lidar

Radar

- Premium addresses mostly headlamp users
- Enterprise allows to run one of each sensors
- Additional add-ons are required to run simulations with multiple cameras, radar or Lidar
- Workgroup of sensors replaces any add-on of any type

Example: 1 Sensor add-on workgroup 4 allows to run from simulation to simulation

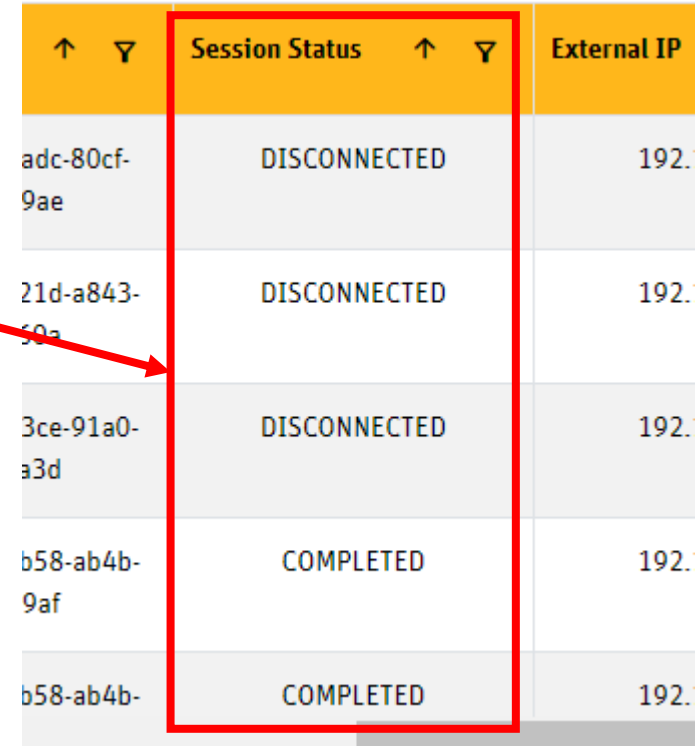
- 4 cameras
- 2 cameras + 2 radar
- 2 cameras + 1 radar + 1 lidar

# Elastic Licensing



# Improved robustness and status reporting

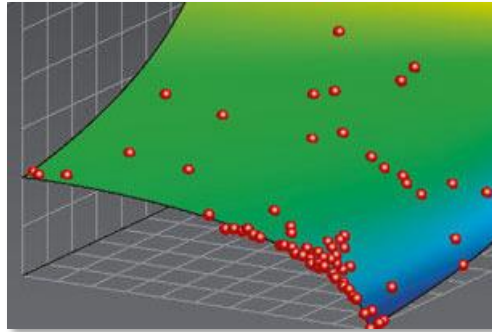
- Server upgrades improve responsiveness and robustness
- Usage Transactions table now indicates status for each session



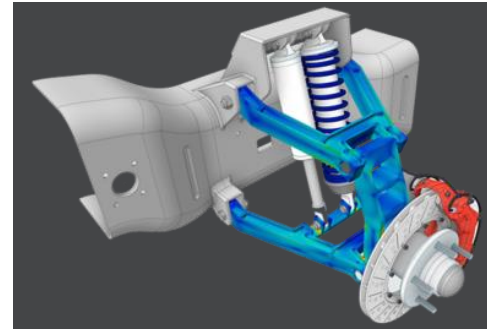
	↑ ▾	Session Status	↑ ▾	External IP
adc-80cf-9ae		DISCONNECTED		192.
21d-a843-50a		DISCONNECTED		192.
3ce-91a0-a3d		DISCONNECTED		192.
b58-ab4b-9af		COMPLETED		192.
b58-ab4b-		COMPLETED		192.

# Additional product support

- Now supported by Ansys Elastic Licensing



Ansys optiSLang  
Enterprise



Ansys Discovery  
Simulation



See the [Software Rate Table](#) for hourly consumption rates per product

 **Ansys**

