

# **Release 2022 R1 Highlights**

## **Ansys Minerva**



# Release Summary

- Data Management
- Process Management
- HPC Job Submission
- Dashboards and Reports
- Applications creation & deployment

# Data Management



# Ansys Workbench Project Comparison

Gain insights and make better decisions with side-by-side comparison of Ansys Workbench projects

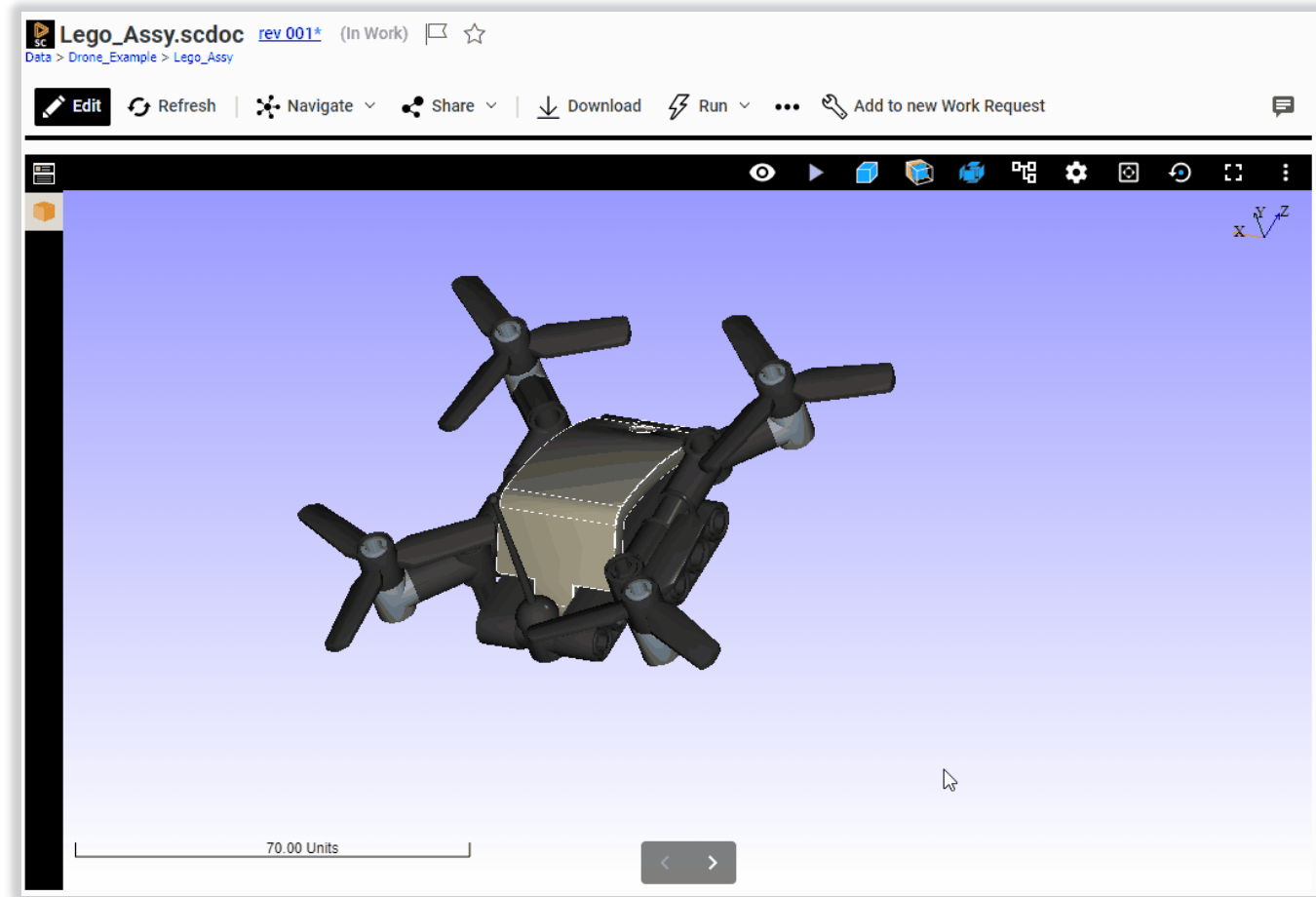
- Instantly assess differences in Ansys Workbench file and folder structures
- Compare changes made by team members to the content of the project files
- Includes the ability to compare metadata of the project files as well as the content of these projects

Comparison Report			
<a href="#">+ Add an Item</a>		<a href="#">Metadata</a>	<a href="#">Contents</a>
MQ-3.wbpz Rev 001 - Ansys Admin - 11/3/2021 12:57 PM		MQ-3_Static.wbpz Rev 001 - Ansys Admin - 11/3/2021 12:13 PM	
MQ-3_files	MQ-3_files		<a href="#">Compare</a>
dp0	dp0		<a href="#">Compare</a>
global	global		<a href="#">Compare</a>
MECH	MECH		<a href="#">Compare</a>
SYS.engd	SYS.engd		<a href="#">Compare</a>
SYS.mechdb	SYS.mechdb		<a href="#">Compare</a>
SYS	SYS		<a href="#">Compare</a>
ENGD	ENGD		<a href="#">Compare</a>
MECH	MECH		<a href="#">Compare</a>
act.dat	act.dat		<a href="#">Compare</a>
designPoint.wbdp	designPoint.wbdp		<a href="#">Compare</a>
session_files	session_files		<a href="#">Compare</a>
journal1.wbjn	journal1.wbjn		<a href="#">Compare</a>
journal2.wbjn	journal2.wbjn		<a href="#">Compare</a>
journal3.wbjn	journal3.wbjn		<a href="#">Compare</a>
.project_cache	.project_cache		<a href="#">Compare</a>
MQ-3.wbpj	MQ-3.wbpj		<a href="#">Compare</a>

# Exploration Options within 3D Viewer

Get a better understanding of your 3D models with options to explore and access to more information

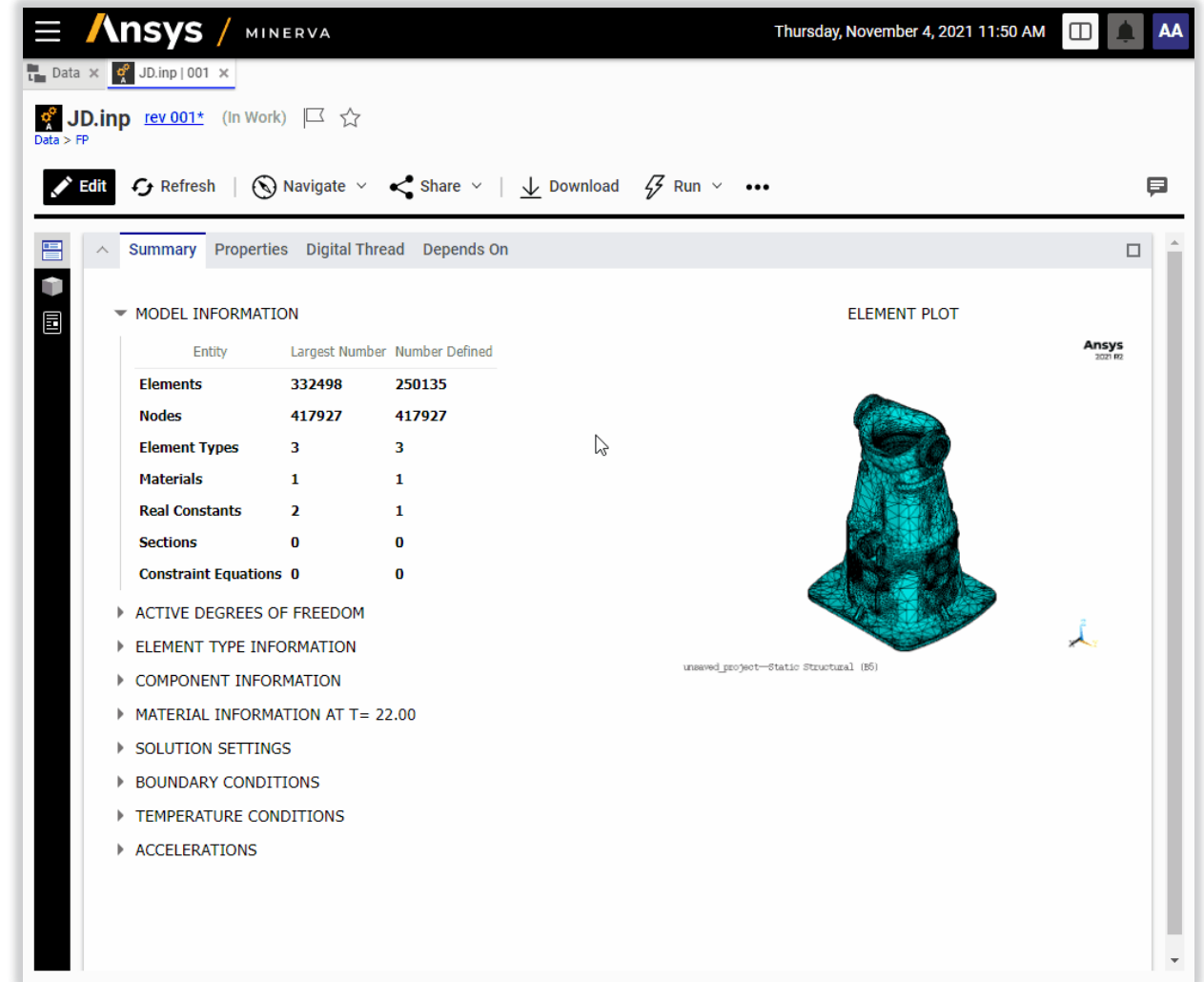
- Users can create and modify cutting planes to view the model from various perspectives
- The explode feature lets users understand part assemblies better and how the model is setup
- Only expose relevant information with the ability to hide parts/bodies within the model



# Metadata Extraction for More File Types

Gain deeper insights into the simulation analysis results with extended metadata extraction support to more file types

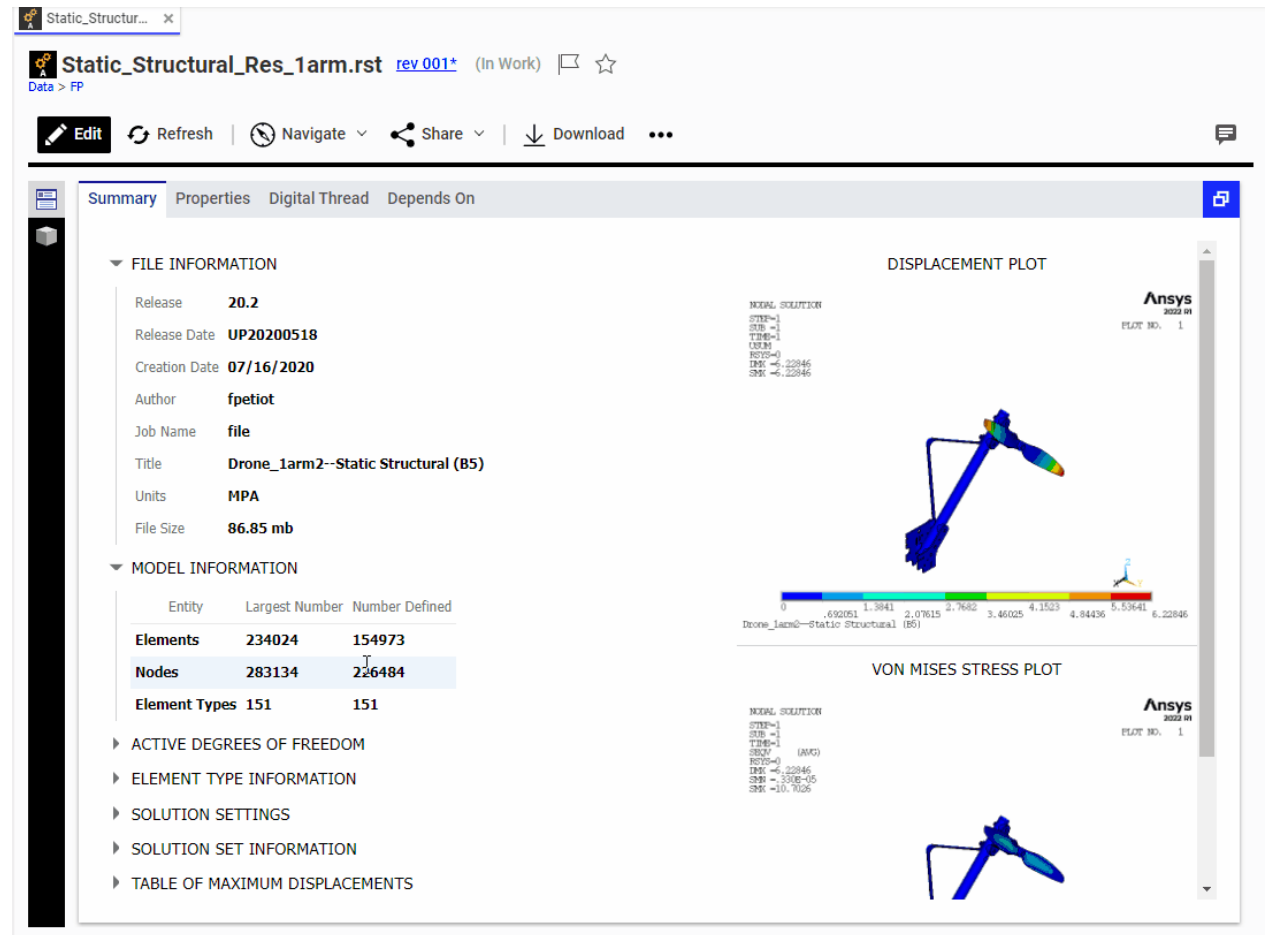
- Support for new file types: MAPDL input files, Fluent file types (.gz, .h5)
- Additional hooks to easily extend default Metadata extraction



# New File Details View

Streamlined and easier access to the context of your data with the redesigned file details view

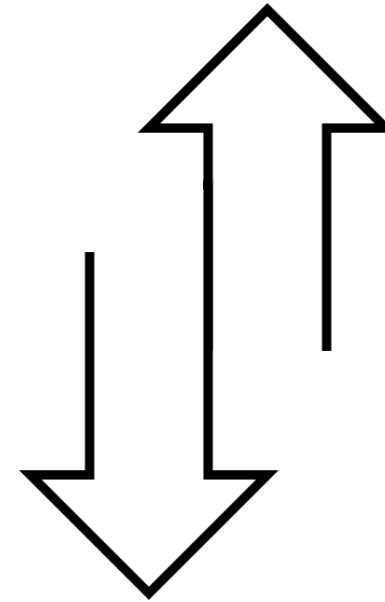
- A new and simplified data tab (with a subset of Details, Metadata, and System Properties tabs) has been replaced with two tabs: Summary and Properties.
  - The Summary tab displays a simulation details report.
  - The Properties tab displays a file's system properties.
- Consistent UI in Edit and Non-Edit mode
- The UI is easily extensible via configuration



# / Data Management Performance Enhancements

Enhanced efficiency in interacting with  
Ansys Minerva

- Removal of browser freezes during large uploads
- Faster uploads for large data sets
- Faster Metadata Extraction (up to 10x)
- Optimization of file management during Metadata Extraction





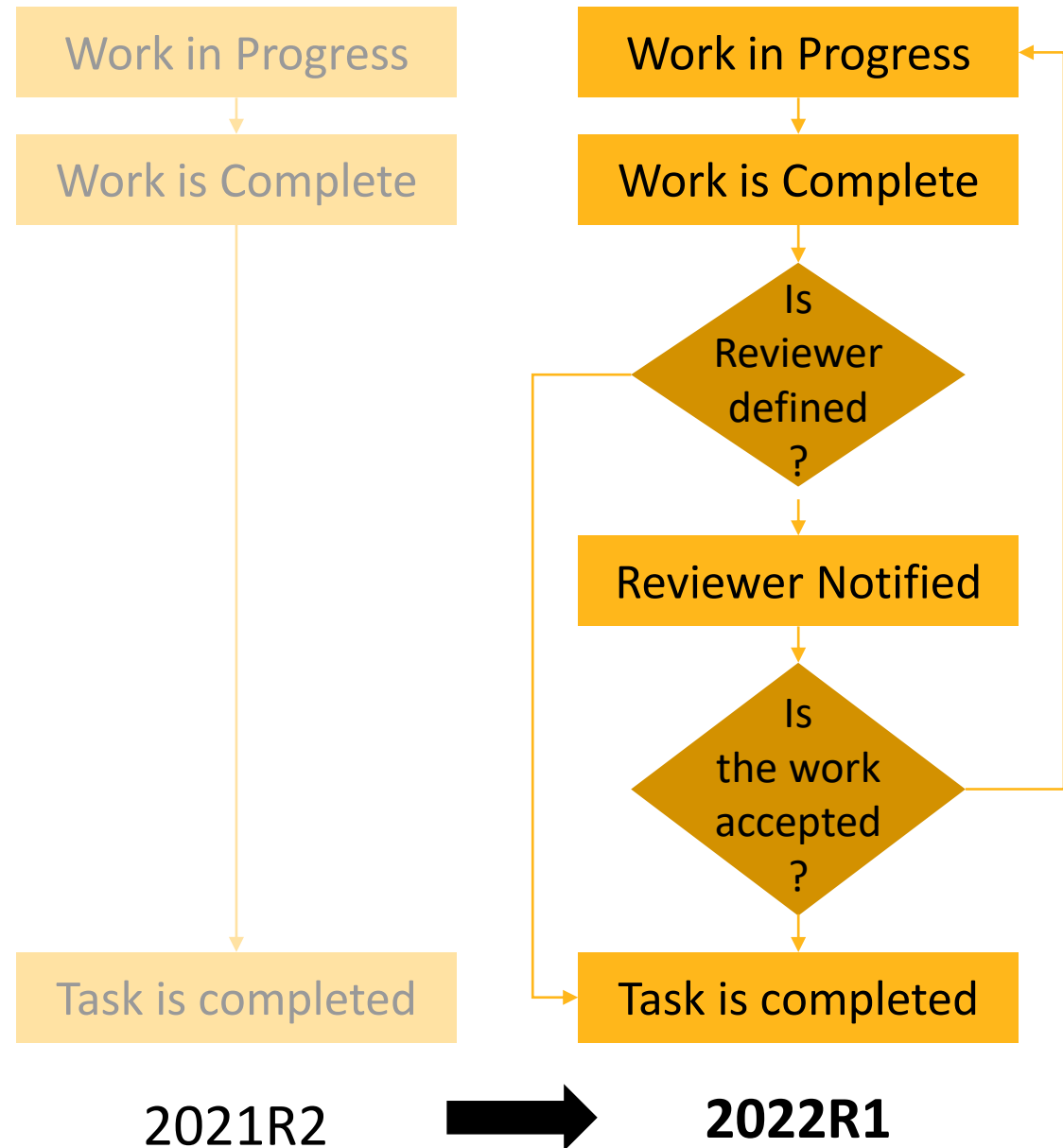
# Process Management



# / Simulation Task Review

Orchestrate your review process by incorporating a reviewer within the task process

- Reviewers can be added to review the tasks to enable downstream decision-making
- Reviewers are notified by emails
- Reviewers can Accept or Reject the Task



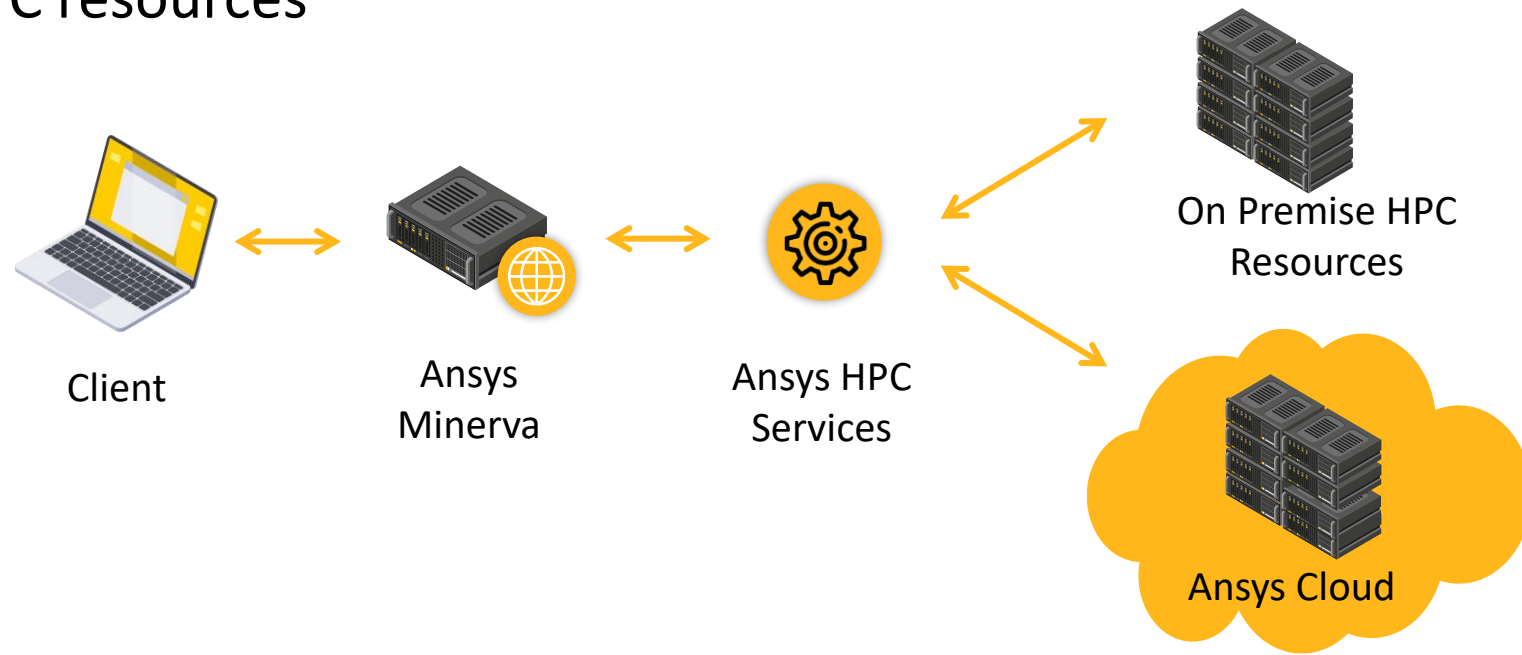
# HPC Job Submission



# / Job Submission to Ansys Cloud

Streamline your HPC job submissions directly from Ansys Minerva to Ansys Cloud and leverage Ansys Cloud's infinite HPC resources

- Manage the data generated by HPC job submissions to Cloud within Ansys Minerva
- Monitor your Ansys Cloud job submission status
- Consistent user experience irrespective of whether the user submits jobs to On-Prem HPC resources or to Ansys Cloud



# / VDI: Windows Remote Desktop

Solve network issues by using Remote VDI to interact with Ansys Minerva

- Start remote visualization sessions managed by Ansys Minerva
- Ansys Minerva controls the Data Flow in and out, as for other Applications
- Starts Windows Remote Desktop sessions



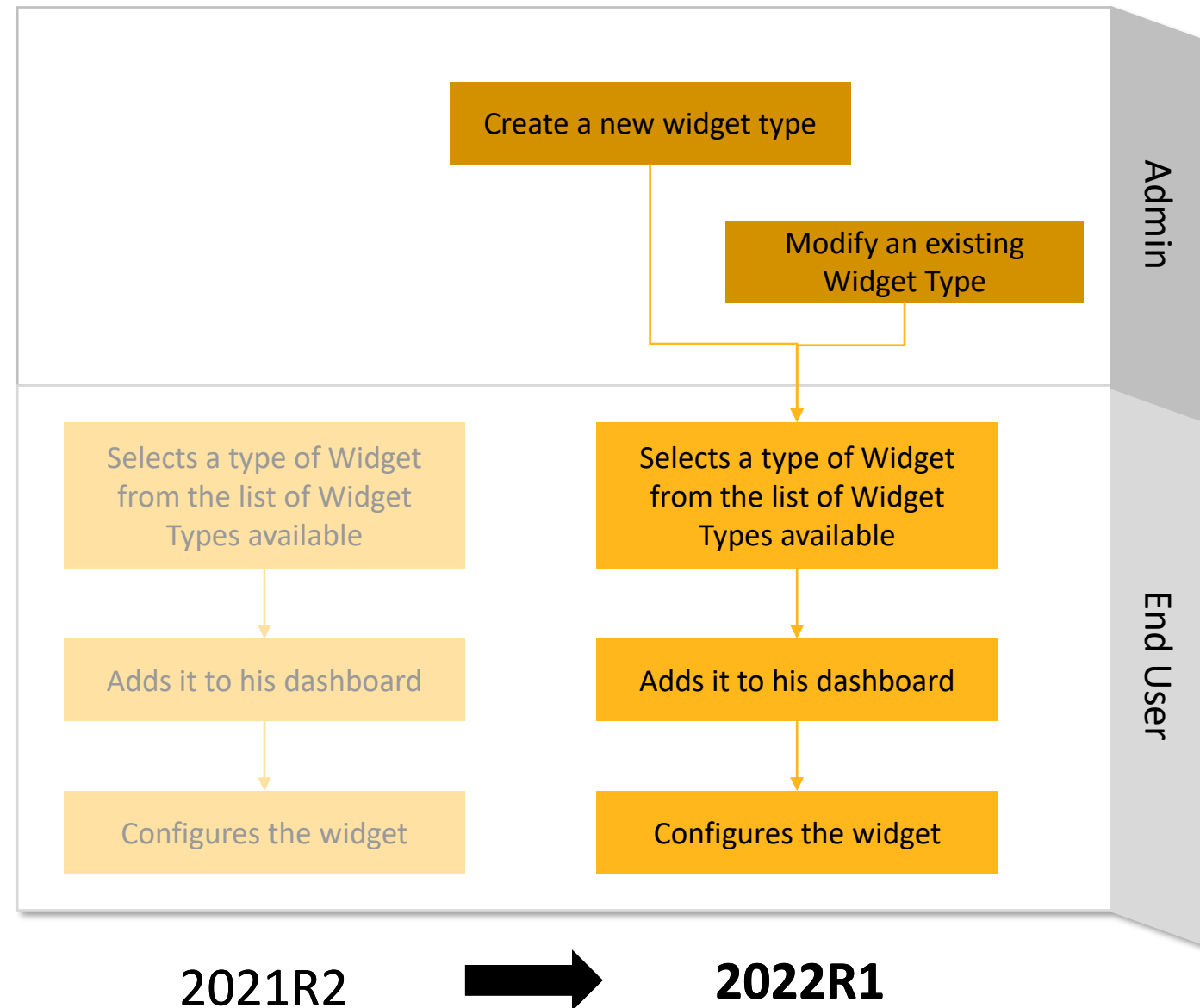
# **Dashboard and Reports**



# Custom Widget Framework

Create customized widget types to expose relevant and more valuable information in the dashboards

- Admins can create new widget types and make them available downstream to all team members
- Enrich the existing list of widget types available by creating and sharing new types of widget
- Extend the existing widget types



# **Applications creation & deployment**

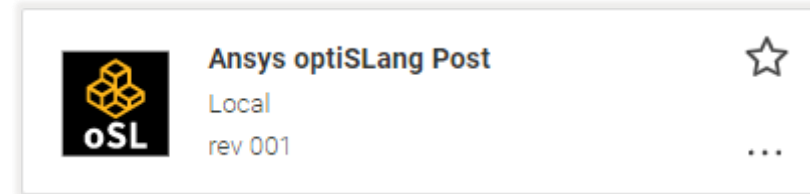
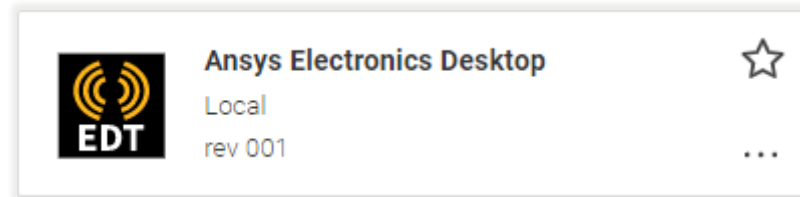




# / New Local Applications

Access locally available Ansys tools from Applications

- Local App for Ansys EDT
  - Uses .aedtz or .aedt projects
- Local App for optiSLang Post-Pro
  - Uses .omdb result files



# / Run Apps without Input Files

More possibilities to use your Apps with reduced dependency on input files.

- Applications don't necessarily require input files to be run
- Now, input files are not mandatory anymore to start your applications
- Works for local and batch Applications

**Run Batch (Design Optimizer)**

Name: Job #000850 for Ansys Admin

**Inputs**

Number of Blades \* 2-4

Velocity (meter/sec) \* 8

Drone Weight (g) \* 240

**Hardware Settings**

Queue ...

☐ Keep job outputs on HPC head node

**Output**

Output Folder ...

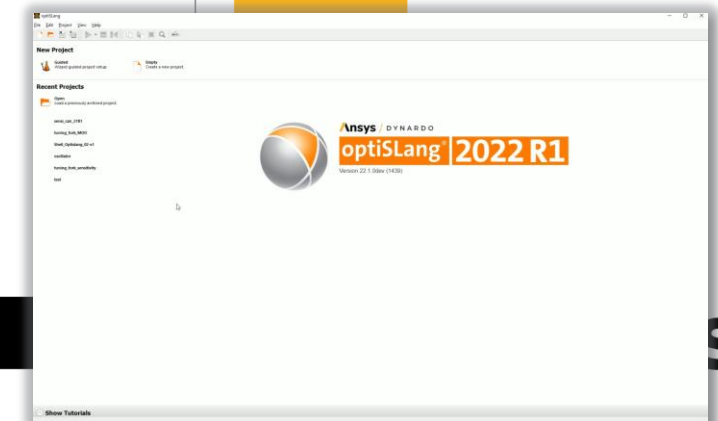
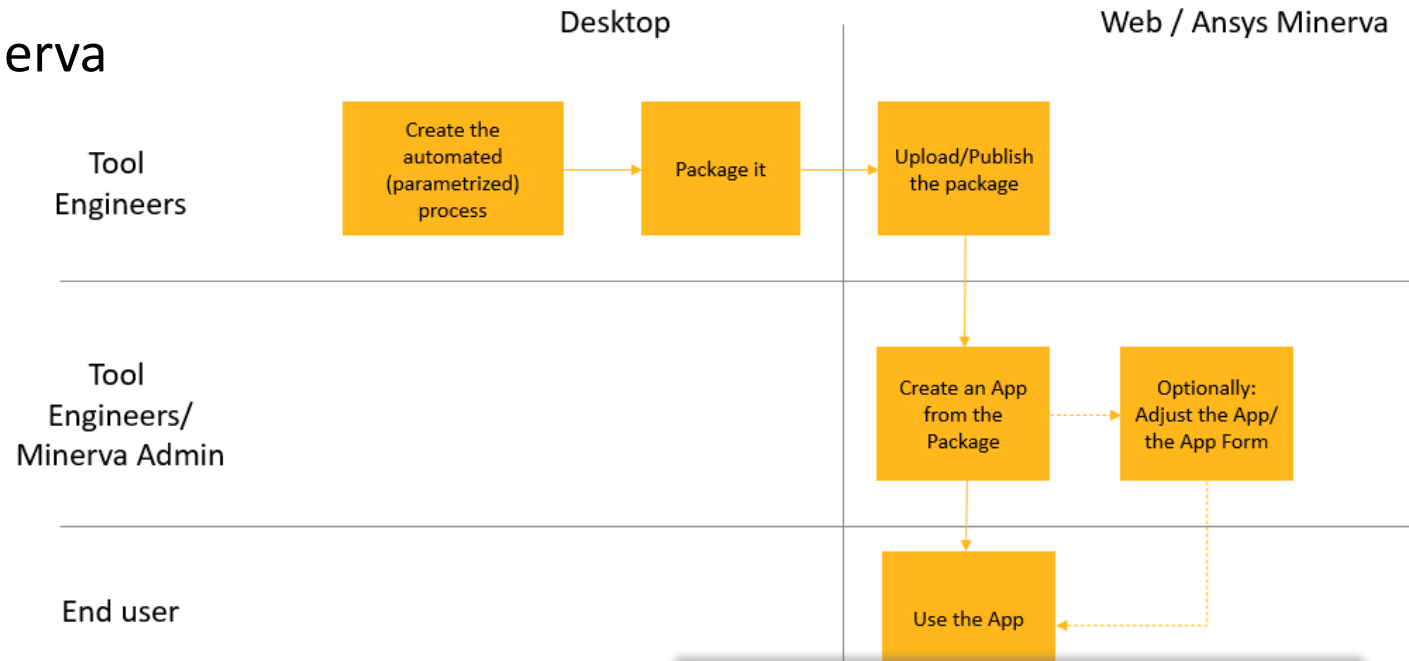
**Submit**

*Example of an application with no input files*

# / Publish and Deploy Apps

Save engineering time by converting simulation automations into apps and deploying them directly from Ansys Minerva

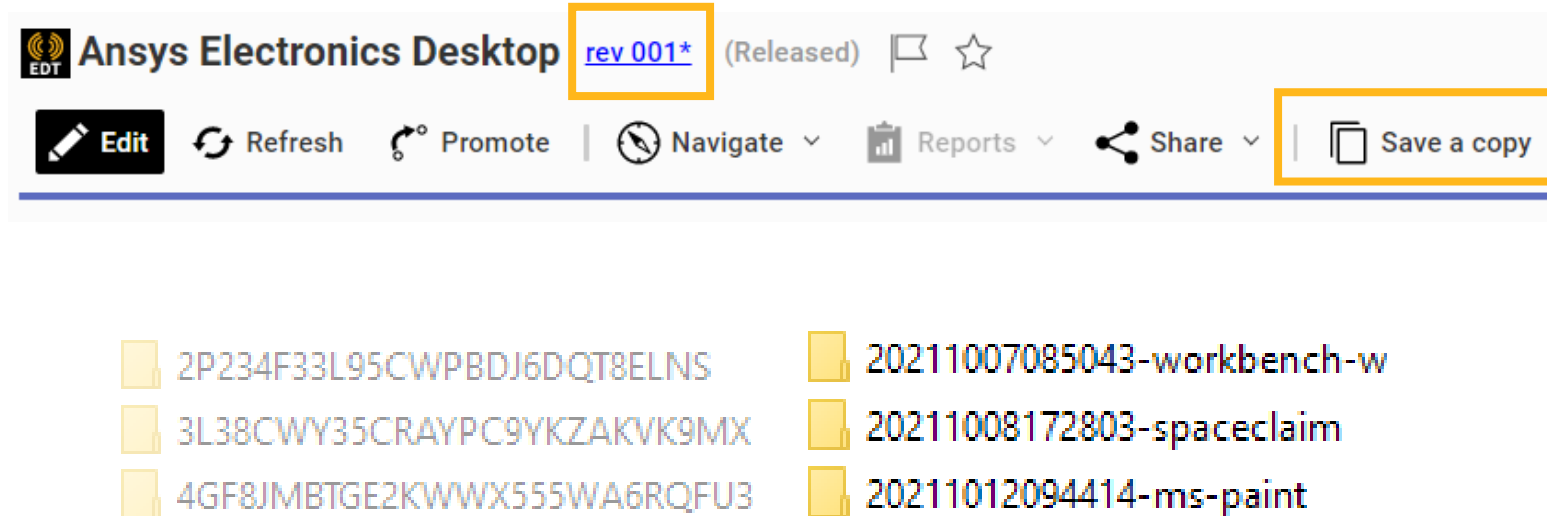
- Tool engineers can package their simulation automations and upload to Ansys Minerva
- Admins can then convert these packed automations into apps and manage them directly within Ansys Minerva.
- The apps can be modified if needed and deploy them to the entire enterprise including simulation non-experts
- Ansys optiSLang is supported out-of-the-box and others can be supported through configurations.
- Track the data flow in and out



# / Additional enhancements around Applications

## Better Applications usability and Management

- New “Save a Copy” button to ease the creation of a new app from an existing App
- Versioning is now activated on Applications
- Clearer naming for the local working directory



2021R2



2022R1

 **Ansys**

