

OMNIVERSE NUCLEUS

- Nucleus is a server that helps creating different applications by collaborating different users at the same time from different workstations or editors such as houdini, maya, blender, adobe. Nucleus have database in which it uses navigator tool to navigate the files.
- It works with publisher subscriber pattern, and there are users at one end and different applications at the other end.

Some of the **ADVANTAGES** are:

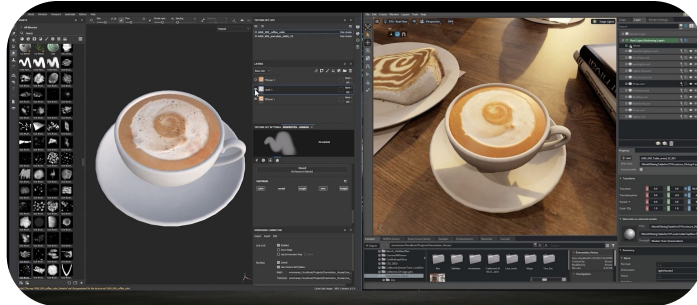
- The changes are transmitted really fast to third party rendering applications like above apps.
- We can also do version control with checkpoints of yours apps.
- We can deploy this nucleus server on any cloud applications such as aws, google cloud, coreweave.



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Different components of NUCLEUS:

- Navigator, Usd composer, Deep search, Nucleus connector.
- **NAVIGATOR:** is an app for accessing files and user administrator and acts as the event bus in publish subscriber pattern to connect between applications and users.
- **USD:** is universal scene description by pixar and in this we can add multiple usd layers by different users to create some 3d application.
- **DEEP SEARCH:** You can search for different props inside your database without the uses of any tags and labels and uses ai to search for the shape of image or prop we are trying to search
- **NUCLEUS CONNECTOR:** This is a connector that enables work in different workstations like houdini, maya, etc.. such that users can work at the same time.



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We can build our own Metaverse game easily with this Nucleus server by collaborating with different developers at the same time from their own comfortable application such as houdini, maya, adobe, etc.. and this Nucleus Server is portable at your own cloud server for own private licensing.