Apparatus Features

The current list of features includes:

- Fundamentally ECS. A complete Unreal Engine integration of the data-oriented workflow.
- Loyal to the ecosystem. Both C++ and Blueprint development paths are supported.
- Best of two worlds. Flexible UObject-based Details and firm performant Traits.
- Pedal to the metal. Featuring the Chunk-based data storage that is hardware-friendly and cache-oriented by design. Quite a bit of performance optimizations on top: lookup tables for a faster Filtering, bitarray-based matching, mainline Component indexing and more.
- Power at your fingertips. Our C++lambda-based operating with an argument dependency injection is your next favorite shorthand.
- Querying with ease. A versatile Component-including and -excluding filtering for the Mechanics.
- Fine-grained selection. Bitwise Flagmark filtering support for boolean-based states.
- Straightforward editing. Assign and customize your Component blocks right from the Details Panel in Unreal Editor.
- Multiple Details of the same class on a single Subjective are supported. All of the available Detail combinations are processed in the Operating body.
- Inheritance at will. The Detail classes can be inherited for extra modularity and flexibility.
- Concurrency scaling. Full multi-threaded iterating support with a dedicated compile-time Solid semantic for extra safety.
- Ready to speak traffic. An elegant and versatile custom networking solution built upon the Unreal's replication and RPC functionality.
- Dedicated in-Editor user experience touches for some clear reading, validation and overall ease of use.
- Stable clockwork. The steady-ticking implementation provides for some extra stability of your frame-dependent logic.
- Thoroughly documented API with a dedicated user manual wiki pages.