

# VIRTUAL ENTITY



## Metadata system project

This infrastructure is a non-compulsory possibility for releasing digital files allowing identification, communication and exchange. It is a form of decentralised archive whose growth will be peer, spontaneous and uncontrollable.

## CONCEPT

Digital entities are nature, they do not belong to anyone.

The net is a morphing distributed body mirroring current human culture.

Any digital immaterial creation can be instantiated in an infinite number of copies identical to the original native file. Culture does not have owners.

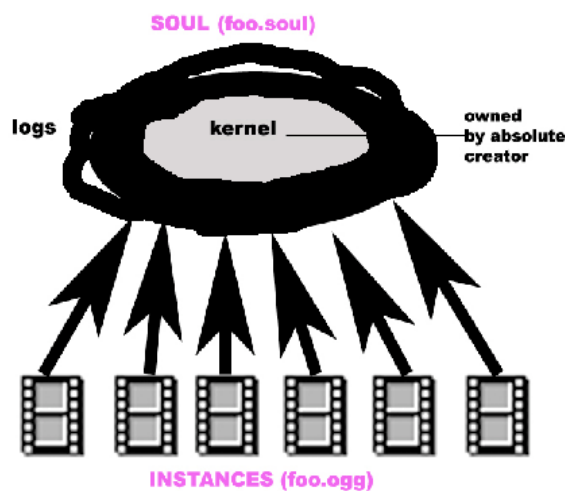
Virtual Entity is an attempt to

- track history of digital media art on the net, transformations, works-chains, artists (mapping)
- allow direct connection and dialogue between users, creators, viewers, artists, listeners, voyeurs and people in general
- contain instructions and suggestions on best usage, digital file destiny and fate
- provide feedback on art and communication, develop discussion about content, aesthetics, philosophy, art

## DEVELOPMENT

Virtual Entity is a technical implementation of the concepts of ontology and identity within the digital domain. It will be a fast, non-controllable system based on simplicity, efficiency and spontaneous participation. Virtual Entity is the development of a software that provides the possibility to twin any file with a 'Soul'. The 'Soul of a file' is a set of metadata plus an editable and unlimited space for information inter-change. The 'Souls Repository' will be centralised and decentralised, using both a chain of servers and the peer propagation. Every instance of a file will contain an address pointing to the Soul, accessible via browser or command line. Any addition to the Soul will be visible from every existing instance of the file entity.

**THE SOUL OF A FILE = KERNEL + LOGS**



**kernel** = basic metadata, written by the file creator, machine understandable, permanent, global, possibly language independent

**aura** = logs, editable by anybody

The basic metadata are editable only by the original creator (when there is an absolute creator). The Aura is similar to a wiki, open for comments, logs and documentation; this space can be edited by any user of the file. Virtual Entity is a non-compulsory possibility: no user is obliged to read or edit the Soul. Since the Soul is separated from the file instance, every file copy has to contain the key pointing the Soul. The main technical innovation of the Virtual Entity is the method to couple file instance and Soul. The main advantage is the separation between file and metadata, which implies universal access to new content and the possibility for progressive editing of the Soul (Aura expansion). The file integrity can be authenticated, and the Aura will contain an interactive code to prevent spam, the Anti Poltergeist System (APS). The use of this system allows mapping of genetic relations and inheritance between files (digital DNA): every single Soul can point to all the Souls of the parent-files that are contained in it, and every file created can propagate in sub-files. A spread use of this software will create a self generating media data history and archive. Since Virtual Entity is a new, simple answer to the problem of attribution of digital creations, it can also be considered as a licence: it is a technical system which represents each work as a peculiar, non unique entity, manifesting specific what specific is.