**O5 – Functions**

**Overview:**  
O5 is designed to be a very simple and easy to understand method of implementing complex systems of programming objects. The author has attempted to decompose to the absolute minimum the set of required functions needed to facilitate a usable and practical operating environment for programmable objects. The five functions listed here should provide all that is required for an O5 object/program implementer to build simple to complex systems. The motivation for such a limited set of functions is multi-faceted. Here are some of the more obvious side effects of O5; easy to understand, portable, modular, verifiable, maintainable, distributable, fast, and flexible.

O5 and the limited set of O5 Functions are **NOT** intended to limit or restrict the implementer of objects in the O5 Universe. It is **suggestive** of an approach and philosophy that would guide design and implementation to use O5 functions to decompose and encapsulate functionality. There are cases where complex programming is required to implement objects. Those are natural for inclusion in the O5 reality and materialization for use across a domain or address space. The word **“OBJECT”** is a generic term used to describe the lowest level in the O5 address hierarchy that is implemented. Generally the highest O5 level the author uses for Objects is “Thing.”

**Functions:**

**FIND –** Locate an object in O5

**ADVERTISE –** Announce the existence of an O5 object

**SEND –** Send information to O5 object

**RECEIVE –** Get information from O5 object

**WAIT –** Wait for, or synchronize on event or object