

another program, and a scheduled time event for program invocation. This triggering event typically identifies the application to be invoked.

At **612**, the OS **112** creates an instance of the identified application described by its application prototype. This instance is called an “application abstraction.” As illustrated by example structure **500** of FIG. **5**, creating the application abstraction includes creating new instances of associated processes described by their process prototypes.

At **614**, the OS maintains “dynamic” metadata that links associated processes with the identified application abstraction, processes with process prototypes, and applications with application prototypes.

At **616**, the OS facilitates identification of and communication with application abstraction by other software components.

Exemplary Computing System and Environment

FIG. **7** illustrates an example of a suitable computing environment **700** within which an exemplary self-describing artifact architecture, as described herein, may be implemented (either fully or partially). The computing environment **700** may be utilized in the computer and network architectures described herein.

The exemplary computing environment **700** is only one example of a computing environment and is not intended to suggest any limitation as to the scope of use or functionality of the computer and network architectures. Neither should the computing environment **700** be interpreted as having any dependency or requirement relating to any one or combination of components illustrated in the exemplary computing environment **700**.

The exemplary self-describing artifact architecture may be implemented with numerous other general purpose or special purpose computing system environments or configurations. Examples of well known computing systems, environments, and/or configurations that may be suitable for use include, but are not limited to, personal computers, server computers, thin clients, thick clients, hand-held or laptop devices, multiprocessor systems, microprocessor-based systems, set top boxes, personal digital assistants (PDA), appliances, special-purpose electronics (e.g., a DVD player), programmable consumer electronics, network PCs, minicomputers, mainframe computers, distributed computing environments that include any of the above systems or devices, and the like.

The exemplary self-describing artifact architecture may be described in the general context of processor-executable instructions, such as program modules, being executed by a computer. Generally, program modules include routines, programs, objects, components, data structures, etc. that perform particular tasks or implement particular abstract data types. The exemplary self-describing artifact architecture may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network. In a distributed computing environment, program modules may be located in both local and remote computer storage media including memory storage devices.

The computing environment **700** includes a general-purpose computing device in the form of a computer **702**. The components of computer **702** may include, but are not limited to, one or more processors or processing units **704**, a system memory **706**, and a system bus **708** that couples various system components, including the processor **704**, to the system memory **706**.

The system bus **708** represents one or more of any of several types of bus structures, including a memory bus or

memory controller, a peripheral bus, an accelerated graphics port, and a processor or local bus using any of a variety of bus architectures. By way of example, such architectures can include a CardBus, Personal Computer Memory Card International Association (PCMCIA), Accelerated Graphics Port (AGP), Small Computer System Interface (SCSI), Universal Serial Bus (USB), IEEE 1394, a Video Electronics Standards Association (VESA) local bus, and a Peripheral Component Interconnects (PCI) bus, also known as a Mezzanine bus.

Computer **702** typically includes a variety of processor-readable media. Such media may be any available media that is accessible by computer **702** and includes both volatile and non-volatile media, removable and non-removable media.

The system memory **706** includes processor-readable media in the form of volatile memory, such as random access memory (RAM) **710**, and/or non-volatile memory, such as read only memory (ROM) **712**. A basic input/output system (BIOS) **714**, containing the basic routines that help to transfer information between elements within computer **702**, such as during start-up, is stored in ROM **712**. RAM **710** typically contains data and/or program modules that are immediately accessible to and/or presently operated on by the processing unit **704**.

Computer **702** may also include other removable/non-removable, volatile/non-volatile computer storage media. By way of example, FIG. **7** illustrates a hard disk drive **716** for reading from and writing to a non-removable, non-volatile magnetic media (not shown), a magnetic disk drive **718** for reading from and writing to a removable, non-volatile magnetic disk **720** (e.g., a “floppy disk”), and an optical disk drive **722** for reading from and/or writing to a removable, non-volatile optical disk **724** such as a CD-ROM, DVD-ROM, or other optical media. The hard disk drive **716**, magnetic disk drive **718**, and optical disk drive **722** are each connected to the system bus **708** by one or more data media interfaces **725**. Alternatively, the hard disk drive **716**, magnetic disk drive **718**, and optical disk drive **722** may be connected to the system bus **708** by one or more interfaces (not shown).

The disk drives and their associated processor-readable media provide non-volatile storage of computer readable instructions, data structures, program modules, and other data for computer **702**. Although the example illustrates a hard disk **716**, a removable magnetic disk **720**, and a removable optical disk **724**, it is to be appreciated that other types of processor-readable media, which may store data that is accessible by a computer, such as magnetic cassettes or other magnetic storage devices, flash memory cards, CD-ROM, digital versatile disks (DVD) or other optical storage, random access memories (RAM), read only memories (ROM), electrically erasable programmable read-only memory (EEPROM), and the like, may also be utilized to implement the exemplary computing system and environment.

Any number of program modules may be stored on the hard disk **716** magnetic disk **720**, optical disk **724**, ROM **712**, and/or RAM **710**, including, by way of example, an operating system **726**, one or more application programs **728**, other program modules **730**, and program data **732**.

A user may enter commands and information into computer **702** via input devices such as a keyboard **734** and a pointing device **736** (e.g., a “mouse”). Other input devices **738** (not shown specifically) may include a microphone, joystick, game pad, satellite dish, serial port, scanner, and/or the like. These and other input devices are connected to the processing unit **704** via input/output interfaces **740** that are coupled to the system bus **708**, but may be connected by other interface and bus structures, such as a parallel port, game port, or a universal serial bus (USB).