

Jini

Techopedia

What Does Jini Mean?

Jini is a service-oriented architecture that defines a programming model that both exploits and extends Java technology. This programming model enables the construction of secure, distributed systems consisting of federations of well-behaved network services. Jini helps to build networks that are scalable and flexible, which are required attributes in distributed computing scenarios.

Jini's main objective is to shift the focus of distributed computing from a disk-drive-oriented approach to a network-adaptive approach by developing scalable, evolvable and flexible dynamic computing environments. Jini makes resources over a network look like local resources.

Jini may also be referred to as Apache River.

Techopedia Explains Jini

Jini was introduced in July 1998 by Sun Microsystems. It consists of a set of specifications and a starter kit, which includes the implementation of Jini technology. Both are released under the open-source Apache 2.0 License. Jini is implemented in the Java programming language and is similar to Java remote method invocation, except that it is more advanced.

Jini provides desirable features and facilities like nonprotocol dependence and code mobility. In fact, code mobility is the key concept. Jini not only allows for the addition of printers, storage and other devices to a network, it also allows the devices to be detected automatically over the network without having to reboot the system. Hardware devices declare to their own operating systems as well as to other computers, devices and users on the network that they have been added and are available for use. This is possible because the devices define themselves to a network device registry soon after they have been added.

The Jini architecture is divided into three main parts:

1. Client: The user who accesses the resources shared over a network
2. Server: The system to which the resources are attached
3. Lookup Service: Services for resources such as printers, storage devices and speakers, which are attached to the server and made available to clients over the network

Jini has the following key advantages:

- Helps in upgrading systems
- Helps to keep old clients running while adding new ones
- Helps build scalable, dynamic and flexible networks