

## IMPLEMENTATION OF ADHOC NETWORK TO ENABLE CENTRALIZED AND DISTRIBUTED COMPUTING AND RESOLVING SECURITY ISSUES USING PASSWORD AUTHENTICATED KEY EXCHANGE BY JUGGLING

<sup>1</sup>Savita Sheoran, Research Scholar, Department. Of CSE, PPIMT Hissar

<sup>2</sup>Gagandeep, Department of CSE, PPIMT Hissar

**Abstract:** In this Research we have made implementation of distributed and centralized systems and the security issues associated with those systems. Four commonly used distributed systems were considered for detailed analysis in terms of technologies involved, security issues faced by them and solution proposed to circumvent those issues. Finally the security issues and the solutions were summarized and compared with each other. When systems work in this collaborative fashion with other systems that are geographically scattered over wide distance it is commonly known as a distributed system.



© iJRPS International Journal for Research Publication & Seminar

**Keywords** – Centralized System, Distributed systems, security, Brute-force attack, Cryptography, Encryption, Decryption

### 1. Introduction to ADHOC Network

An ad hoc network is a network which is composed of single devices communicating with each other directly. term implies spontaneous or impromptu construction since these networks usually bypass gatekeeping hardware or central access point these as a router. Many ad hoc networks are local area networks where computer system systems or other devices are enabled to deliver data directly to one another rather than going through a centralized access point.

"Ad Hoc" is actually a Latin phrase which means "for this purpose." It is usually used to describe solutions which are developed on-the-fly for a specific purpose. within computer system networking, an ad hoc network refers to a network connection established for a single session & does not require a router or a wireless base station.

The idea of an ad hoc network is usually unfamiliar to end users who have watched small residential or business networks which use a typical router to deliver wireless signals to single computer systems. However, ad hoc network is being used quite a bit within new types of wireless engineering, although until recently it was a rather obscure idea. For example, a mobile ad hoc network involves mobile devices communicating directly with one another. And another type of ad hoc network, vehicular ad hoc network, involves placing communication devices within cars. Both of these are examples of ad hoc networks which use a large collection of single devices to freely communicate

without any kind of hierarchical or top-down communication structure.

Experts point out which for small local area networks, ad hoc networks may be cheaper to build since they don't require as much hardware. However, others make point which a large number of devices may be difficult to manage without a larger & more concrete infrastructure. Technical front-runners are looking at ways to enable more vibrant network functionality with these peer-to-peer networks.

### 2. Centralized and Distributed ADHOC Network

#### Centralized & Distributed Network

Both of network models are explained below one by one.

#### Centralized

**Note :** For Complete paper/article please contact us [info@jrps.in](mailto:info@jrps.in)

Please don't forget to mention reference number , volume number, issue number, name of the authors and title of the paper

