REVIEW PAPER ON SECURITY ISSUES, APPLICATIONS OF RFID

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Abstract: This paper consists of RFID technology which is used within many places such as electronic ticketing, Road tolling, tracking pallet, work within progress, IT asset management etc.It consists of two areas of major security concern & various kinds of attacks which could be possible within front end & back end such as Denial of service attack, tracking, spoofing, viruses, replay & sniffing & eavesdropping. Due to its informational infrastructure RFID could be used for surveillance purposes & several people therefore fear a surveillance state. We have also discussed application areas of RFID such as Logistics & Supply Chain Visibility, Item level inventory tracking, Race timing, Attendee Tracking, RTLS (Real Time Location System).

Keyword: RFID, Microchip, antenna, Trojan, active attack & passive attack, Sniffing & eavesdropping

[1]INTRODUCTION

RFID is a wonderful technology which is widely used within many areas. Some of areas of application are environment, supermarkets, toll-collection, supply-chain management. However it is also known as "advanced bar code system" is known as advanced because cases of bar-code we need exactly line of sight but within case of RFID we do not need any line of code. As distance between reader & code increases its power decreases.

We could broadly classify within to three main categories. These are passive   ,active & semi-passive. We could also classify passive tags further on basis of frequency we use within this technology low frequency passive, high frequency passive , ultra high frequency passive & battery assisted passive tags.
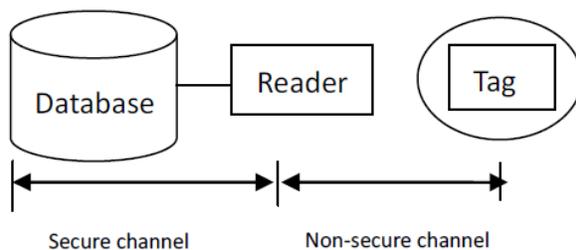

Fig 1. RFID SYSTEM. Fig. 1. The RFID system.

This figure shows that RFID system consist of three parts database, reader & tags.Database is place where all information is stored within database reader is instrument which is used to read data here. Tags are used to place within product to which we want to track. RFID tag consists of:

- ➢ antenna
- ➢ battery
- ➢ case
- ➢ microchip

It provides a survey on radio frequency identification (RFID) technology. Initially RFID tags were developed to eventually replace barcodes within supply chains. The paper describes current technology, including frequency ranges used & standards. With increasing ubiquity of RFID tags, however, privacy became a concern. The outlines possible attacks that could violate one's privacy & it also describe counter measures. The RFID technology did not stop at item-level tagging. Since uses for RFID tags are so widespread, there is a large interest within lowering costs for producing them. It turns out that printing tags might become a viable alternative to traditional production. Various types of tags which are used within

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