Internet Security: Intrusion Detection and Prevention in Mobile Systems

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Description: Daily commerce on the Internet consists of billions of dollars worth of transactions many of which occur between mobile and portable devices such as internet phones, PDAs, notebook computers and other similar devices. Unfortunately, the wireless Internet has become the lurking grounds for electronic n'er-do-wells who are constantly jeopardizing the processes of business.

To counter this trend, the issues of security on wireless networks must be constantly reviewed and appropriate countermeasures devised. At the same time, security measures must be appropriately devised so that they do not inhibit or in any way dissuade the intended e-commerce operation. Understanding the types of threats that are possible and evaluating the susceptibility of a mobile system is fundamental to the development of security measures to prevent intrusion or invasion. As the use of mobile wireless Internet devices grows, and as businesses become more dependant on them, the number of events and the far reaching effects of network security problems are likely to have an even deeper impact on the overall economy.

This session will focus on the types of security problems that can occur in mobile wirelessly-connected systems, the solutions for known problems, and strategies for circumventing these problems in the future.

Topics:

- Identification of intrusion mechanisms specific to mobile devices and the measures that can be taken to exclude their use.
- Recognition of system and network technical vulnerabilities that are specific to mobile devices.
- Establishing and implementing minimum sets of security requirements (standards) in a mobile environment.
- Security breach detection and recovery: mechanisms to detect when critical data has been altered and knowing when to rollback to recovery data.
- Mobile network performance issues related to the use of security measures.
- Software design methods to allow mobile devices to be inherently more secure.
- Certification of security compliant mobile appliances and how this process might affect use of the wireless Internet or Bluetooth networks.
- User training and support for maintaining an individual's part of the mobile Internet.

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