

CHASE-2007 Conference on Hacking and Security

— Hackers Meet in Lahore

By Hasnain Ahmed

During the previous decade, the world has seen a dramatic change in how information is stored, processed and retrieved. The shift from paper-based information storage to the electronic form has brought about various other entirely new parameters into play. Perhaps one of the most important is security aspect of the data and information. In today's world, all kinds of information ranging from personal data, banking and accounting information to important financial data of large banks, secret engineering designs of big weapon's complex, secret defense related information is now being stored in electronic form. The Internet has become an important means of communication, so much so that all businesses, corporations and nuclear plants have to connect to and use the Internet in one way or the other. The importance of securing information cannot be overstated.

This worldwide shift of paradigm in electronic processing of information has also affected our society in Pakistan as well. During the previous some years, many public and private businesses have started using information technology. Many businesses have likewise set up small networks to meet their needs.

During the previous some years, the importance of securing our networks and information was highlighted by a number of incidents as well. CHASE i.e. Conference on Hacking And SEcurity has been actively promoting awareness about importance of information security for previous some time. It organized its first annual event titled CHASE-2006 last year, which attracted large audience. This year CHASE organized its annual event for the year 2007 titled CHASE-2007 at Institute of Engineers Pakistan – IEP center Lahore. The event spread over three days from February 01 to February 03, 2008. The first day was reserved for presentations and talks whereas second and third days were reserved for training sessions. The event generated a lot of interest amongst IT professionals and information security community. As the website <http://www.chase.org.pk/> states the purpose of the event was "to provide a platform and develop an organization where professionals can exchange their knowledge and ideas and network with each other so as to result in the mutual benefit for all."

The list of speakers included a representation from Pakistani hackers community and other professionals. This included Mr. Abdul Ghaffar representing National Response Center for Cyber Crimes [NR3C] – a division of the Federal Investigation Agency [FIA], Mr. Sufyan Kakakhel representing the Open Source Resource Center [OSRC] which is a division of Pakistan Software Export Board, Prof. Dr. Aftab Malik, Mr. Muhammad Haroon, Mr. Umair Manzoor, Mr. Omar Khushnood, Mr. Shah Mansoor and Mr. Masood Ahmed





Shah. List of all the speakers, their profiles and abstracts of their talks were all posted to the event website as well. The audience was represented by a number of professionals from 2 all across the country including some from the defense agencies, establishment and institutions of Pakistan. At the time of registration, each participant was provided a training kit comprising of a large set of books with a hard folder cover and 9 CDs on various open source software. Books and CDs were provided by the platinum sponsor i.e. OSRC without any charge.

The event began with recitation from the Holy Quran. Mr. Saqib Hussain who was playing the role of anchor provided a brief overview of the scheduled talks. This was later followed by a brief welcome note by Mr. Omar Khushnood. Mr. Muhammad Farooq-i-Azam also delivered a brief note of thanks to all the participants specially those from NR3C and OSRC.

The CHASE-2007 event included two key addresses. The first key address was delivered by Mr. Abdul Ghaffar a forensics expert from NR3C. NR3C is short for National Response Center for Cyber Crimes and is a premier organization of the country working under the administrative control of the Federal Investigation Agency i.e. FIA which is responsible to check cyber crimes in Pakistan. Mr. Abdul Ghaffar in his talk highlighted the information security issues related to Pakistan. He was listened very carefully and attentively by the knowledgeable audience. He also lauded the efforts of CHASE team for organizing such an event and highlighted the importance of producing professionals in information security. He told the audience that the country was in the dire need of producing good quality professionals in this area.

The second key address was delivered by Mr. Sufyan Kakakhel from the Open Source Resource Center, which is a division of Pakistan Software Export Board, Ministry of Information Technology, Government of Pakistan. Mr. Sufyan highlighted the importance of FOSS for Pakistan and the role it could play in the development of IT infrastructure in our country. His enlightening talk titled "Open Source and Government of Pakistan" really absorbed the audience and set the stage for a good discussion on various aspects of the free and open source software. Many participants seemed to be intrigued by the free and open source software and asked questions, which while answering Mr. Sufyan Kakakhel displayed his resourcefulness on the subject. He also very well explained various licensing issues related to free and open source software. The tea break that followed, allowed the audience to mix together and share their thoughts and experience. After the tea break, Prof. Dr. Aftab Malik delivered his talk on ethical and moral aspects of various issues related to cyber security. He explored some areas, which the technical folk really found interesting. Specially, he mentioned that all the legal cases related to cyber security were being dealt by regular courts and still there were no special courts to deal with the cyber security cases.

Mr. Muhammad Haroon in his presentation titled "Exploring and Investigating New Dimensions in Phishing" showed the audience as to how personal information including 3 financial information can be gathered by criminals using various forms of phishing. Mr. Haroon had prepared flash videos for this talk to display various scam and phishing techniques in an interactive manner. His talk was much liked and many from the audience engaged in discussion later on during the questioning session. The lunch was served after this talk and later on break for the Juma Prayer was announced. After the break, Umair Manzoor a computer geek, presented his talk explaining SEH based exploitation using some core programming and assembly language concepts. With nice diagrams and an easy to understand manner, Umair explained very obscure and difficult concepts in a very friendly and amenable manner. Explaining low-level concepts like processor registers, addressing schemes, etc. is considered difficult, but Umair managed to carry on his presentation in a very lively manner. Umair told that his presentation was based upon the work he carried out while working on an overflow exploit in SAMI FTP server. This talk was followed by a presentation

from Omar Khushnood. In his usual avid style, Omar explained the vulnerabilities inherent in the VoIP suite of protocols. He also discussed the history of phreaking and the modern day innovations that can be used to remotely exploit voice protocols. After this Shah Mansoor from OSRC, in his very fruitful presentation provided details of free and open source security tools. He explained how security tools developed by the open source community could lower both the total cost of ownership and security incidents. From port scanners to firewalls, Shah Mansoor explained features of a bunch of security related open source tools including those used for packet sniffing, intrusion detection and email security. No doubt, it is the open source community that innovation and exploration in the area of information security along with many other things. Indeed, the concept of a tool being secure and free of any backdoor is totally unthinkable without it being open source. It is for this reason the real professionals in the area of information security tend to choose free and open source tools for their task. Some of the tools explained by Shah Mansoor included Bastille Linux, Turtle firewall, SmoothWall Express, Ipcop, SNORT, BASE, Tripwire, Wireshark, Nmap, SuperScan, Nessus, Netscan, Nikto and ClamAV.

Finally, Mr. Masood Ahmed Shah gave his presentation on exploitation of network protocols to exhaust bandwidth links. Giving examples with tools used for the job, Masood explained how famous network protocols like TCP and UDP can be exploited to launch attacks against hosts running any services using these protocols. At the end, Mr. Muhammad Farooq-i-Azam again thanked all the speakers and the audience on behalf of CHASE team for making CHASE-2007 a successful event. When the day was called after tea was served to the participants, time was past the deadline set for the end of the day. The event was conducted in a very friendly and amiable environment. The participants had a good exchange of ideas during and after the event. They had a good chance to have an informal discussion and mix with each other during the tea and lunch breaks. The event extended to next two days as well. However, these were reserved for training sessions for which professionals from all across Pakistan registered. The training sessions were conducted by Esecurity, which is one of the foremost organization of the country set up to cater to its information security needs. The participants included professionals from the core defense organizations of the country, IT industry and financial institutions. First track of training conducted on Saturday February 02, 2008 was titled "[Un]Ethical Hacking – How it all works" and was conducted by Omar Khushnood. In a one-day session, the training intended to introduce the audience with the basic and core concepts and tools used for the job. It was a fast track training in which content meant for trainings spread over a week was covered in just one day at reduced cost.

The second day of the training session was titled "Packet Sniffing – Network traffic processing and analysis" and was conducted by noted information security professional of the country and founder of CHASE Mr. Muhammad Farooq-i-Azam. The training generated lot of interest in which Mr. Farooq starting from very basics explained various aspects of packet sniffing and traffic processing using tools some of which he developed himself.

These were first of its kind of training sessions in Pakistan, which catered to the needs of the information security professional community. Further the cost charged was very low compared to similar training sessions conducted in the rest of the world. It is hoped that this will really generate interest in the IT community and would serve as a budding ground for more information security professionals.

The CHASE-2007 event was sponsored by OSRC, Esecurity, Nexlinx and NetMag.

OSRC <http://www.osrc.org.pk/>

Esecurity <http://www.esecurity.com.pk/>

Nexlinx <http://www.nexlinx.com/>

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