

GTU INNOVATION COUNCIL

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One Day workshop on Web Security and Hacking Meetup

Date: 27th April 2019

Time: 10:00 A.M. - 3:00 P.M.

Venue: Block 6, GTU Innovation Council, Ahmedabad

About the event

GTU Innovation Council is one of the elite organization for fostering Entrepreneurship and Innovation under the aegis of Gujarat Technological University. Imagination is the base of innovation. GIC has been designed to establish close bonding between industries, entrepreneur and students to make research and development at the University relevant to the needs of industries at national and international levels.

The Event is all about for implementation of web security and hacking meetup. The Session was exclusively conducted for the students, faculty, startups Innovators in field of Cyber security. The main focus of the event was on how to do web security and what are the important parameters that need to implement into the web development, how hackers will get the access of the mobile data, System data.

About the speakers

Mr. Nilay Mistry, Assistant Professor in GFSU(Gujarat Forensic Science University).

He is Security expert into Cyber Crime activity into GFSU where he has to work to solve the issue and research in the cyber security field. He also solved many Crime related Cases to cyber. He has published more than 5 Research paper on Cyber Security.

Mr. Vismith Rakhech, Security Analyst in Softweb Solution.

He has been in the security field from the last 6 years and currently working as Security Analyst for Softweb solutions(Avnet). he has published white papers on wildlife trade over the internet and Digital Mafia~Decrypted and presented the research papers in Hakon, CSA, OWASP, HackTech, etc. In his free time, he does bug bounty hunting, Avira, Sony, Nokia, HackerEarth, AT&T are the few famous names who rewarded Vismith for finding the bugs in their product.

He has delivered 100+ sessions in on security in colleges and government sectors.

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Mr. Vivekkumar Sinha , Vivek has been in the cloud field from the last 5 years and currently working as a Sr. Engineer in eInfochips. Vivek has worked on enhancing the security of the infrastructure and hardening of the system. He has implemented Warm Site Disaster Recovery and automated the deployment flow. He took 50+ session in the company to create awareness of internet usage.

Highlights from the Session

10:00 am - 11:00 am: Introductions and News Bytes **Mr. Vishal Purani**

11:00 am - 12:30 pm: Volatile Memory Investigation by **Mr. Nilay Mistry**

12:30 pm - 01:30 pm: Surprise Talk by **Mr.Vismit Rakhecha**

01:30 pm – 02:00pm: Lunch Break

02:00 pm - 02:15 pm: Networking Breaks and Question Answer

02:15 pm - 02:45 pm: Business Continuity and Disaster Recovery (BCDR) by **Mr.Vivek Sinha**

02:45 pm – 03:00 pm: Feedback and Next Meet Discussion

The event began with a round of introduction and attended by students, faculties as well as startup members were present in the session.

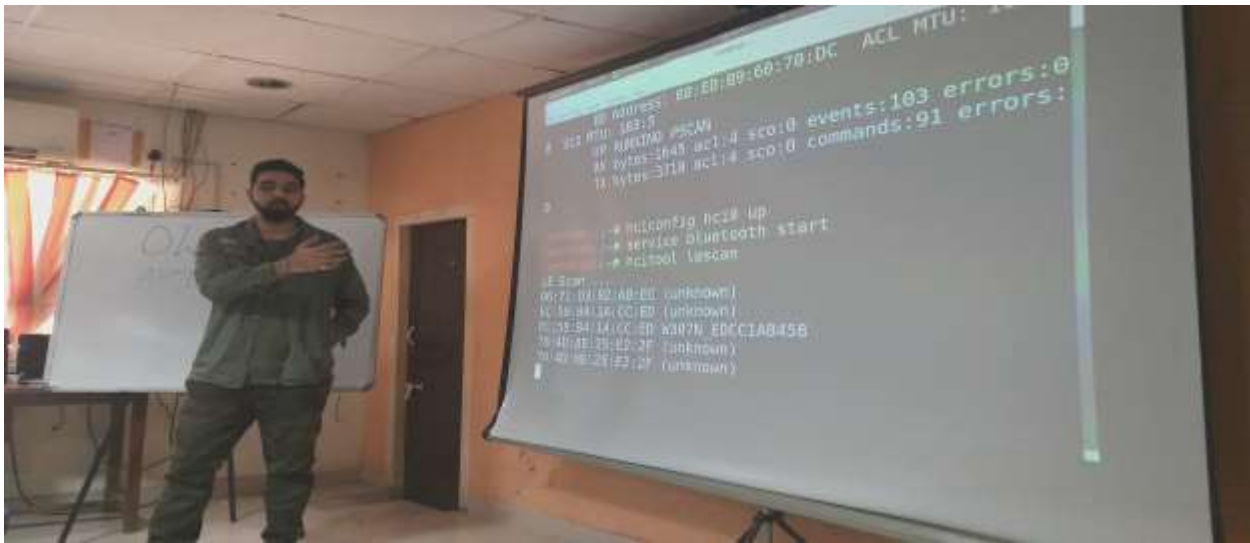
First of all event brief information discuss with the audience who are aware or who are not aware about cyber security and web security. Some of the audience have good knowledge about the web security and cyber security. **Mr.Nilay Mistry** explained the important about security of system, how it help them to solve the case into real time crime solution.



Point discussed by **Mr. Nilay Mistry** is below:

- 1) Volatile memory of CPU and Non-volatile memory of CPU
- 2) How to access the computer system RAM Data
- 3) RAM data conversation of encrypted data to decrypt by some software like belkasoft
- 4) Manage file system, Registry and Network Security.
- 5) Recover data software like : R-Studio, PhotoRec, TestDisk, Disk Drill for mac, Getdataback
- 6) Malware Analysis Software : Procdots
- 7) Web Crawling Browser : Tor, Onionscan
- 8) Investigation Software tools : Hunchly.com
- 9) Ransomware Malware Detection : Fire eye Company- Redline Memorized

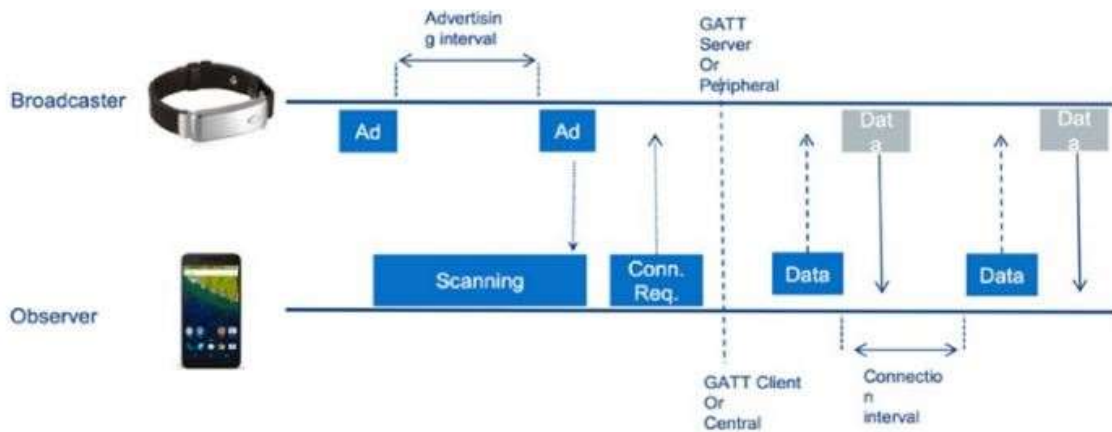
After completion of Mr. Nilay Mistry Sir Session , **Mr. Vismit Rakhecha** took over session to explain the important about the Bluetooth hack device like BLE (Bluetooth Low Energy) , Android bluetooth devices that hacked by using software like KALI. He also discussed about OWASP Ahmedabad. He is Chapter Leader of Ahmedabad OWASP (Open Web Application Security Project).



Point discussed by **Mr. Vismit Rakhecha** is below:

- 1) What is BLE?
- 2) What is GAP and GATT?
- 3) Attributes and Security
- 4) BLE Power Devices Services and Characteristics Exploit
- 5) HCI TOOL , GATTOOL, nRFConnet, bTscanne, hcilog r

He explained each and every point by giving example as well as show the live practical of the BLUETOOTH Devices connected using software and anyone can exploit with the data as hacker can change the value. Some diagram below show the details about the how it work.



References:

<https://systemoverlord.com/2018/04/16/the-iot-hackers-toolkit.html>

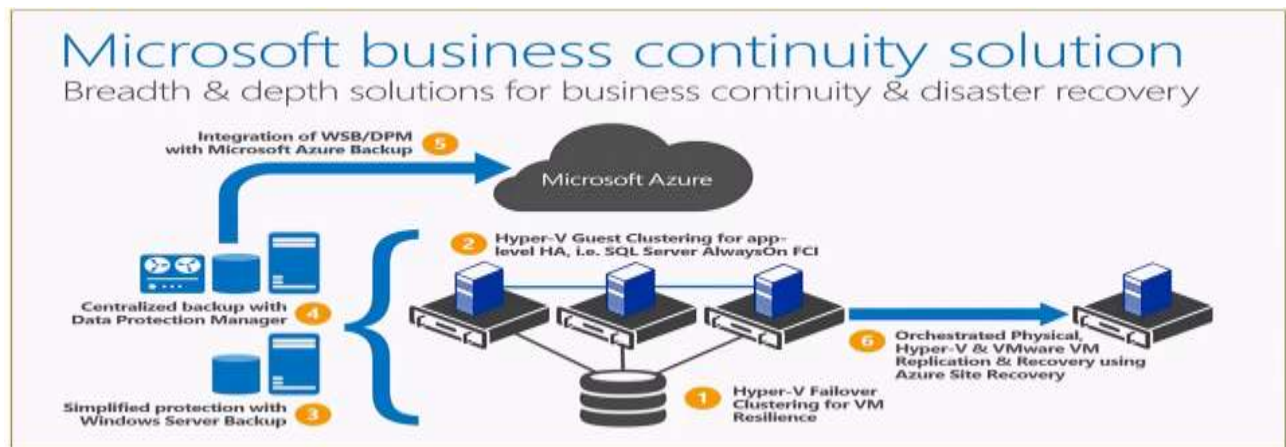
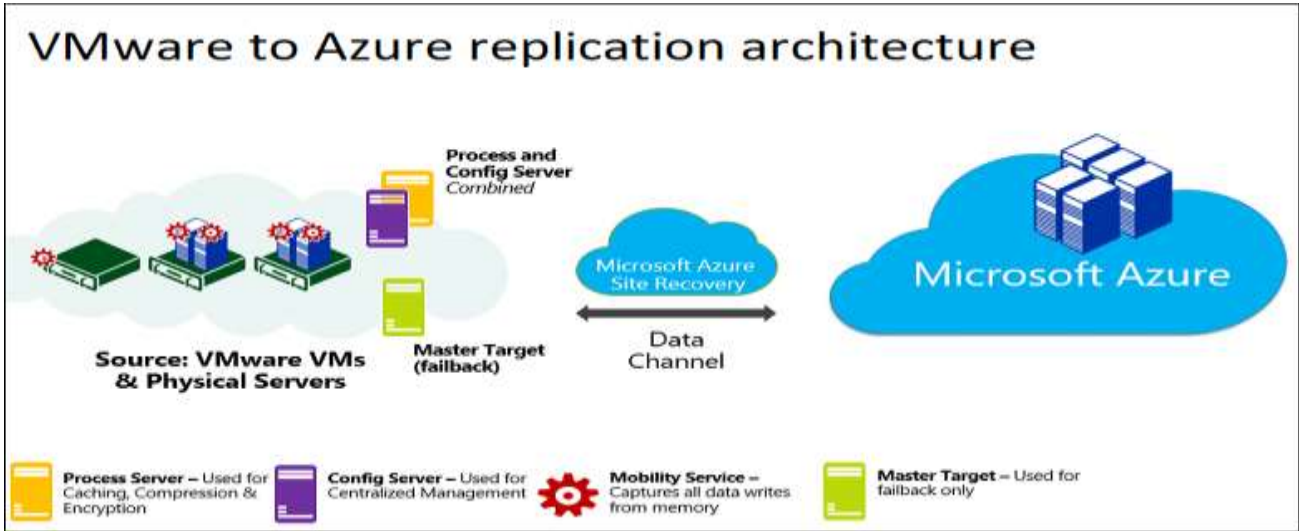
<https://www.mdpi.com/2224-2708/7/3/28/pdf>

<https://threatpost.com/Vulnerabilities>



Mr. Vivekkumar Sinha explain regarding the Disaster Management of the Database Recovery System. He explain how to do Business Continuity Plan (BCP)/ Disaster Recovery Plan (DRP). He discussed below point with audience and given example regarding the Disaster Database Recovery.

- 1) Role of BCP and DRP in Security
- 2) Difference between BCP vs DRP
- 3) What are the benefits?
- 4) How Running a BCP/DRP Project.
- 5) Performing Business Assessment.
- 6) Develop Key Recovery Targets.
- 7) Improving System Resilience and Recovery.
- 8) Server Clusters.
- 9) Replications.
- 10) Azure Site Recovery.
- 11) Azure BCP and DRP.



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Feedback from the audience:

The event was awesome, we should have another Advanced Session for Implementation of Web Security and Data recovery on cloud based.

- Punit Darji

Startup : Rapid Safe Guard.

Great practical session about BLE(BLUETOOTH LOW ENERGY), next time would wish to have an Hands-on session to each audience, would like to work on it.

-Ms. Hettal Tokle

Assistant Professor, Sal College Ahmedabad.

Mr.Nilay Sir Session was very good in which I learn how RAM Data important in Criminal activity to solve the case.

-Mr.Maulik Lakhani

Security Analyst

<https://www.tapchief.com/MaulikLakhani>

The session was great, looking forward for advance topic on Cloud Azure architecture flow as well as data base recovery practical work.

- Mr.Nitin Magjikondi

IT Administrator, GIC.

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Glimpses from the event:



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Photography By: Nitin Magjikondi and Kalpesh Maiyad

Report Prepared by: Nitin Magjikondi

GIC Team