

SPEECH BY GUEST-OF-HONOUR
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AT THE LAUNCH OF TEMASEK POLYTECHNIC'S
MALWARE ANALYSIS CENTRE ON 17 NOVEMBER 2021

Good afternoon,

1. Thank you to TP for the invitation to join you this afternoon to mark a special milestone. The launch of TP's very own Malware Analysis Centre – a result of the collaboration with ST Engineering, CrowdStrike and Palo Alto Networks – is an encouraging sign of progress in the development of Singapore's cybersecurity ecosystem and talent pipeline.

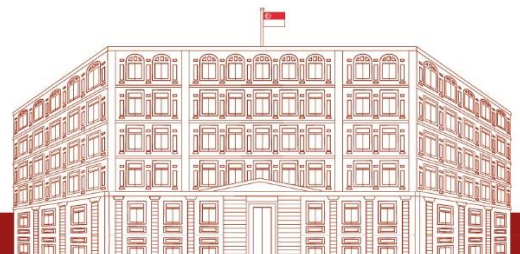
Malware analysis is an important and in-demand skill

2. To the students of TP, I am very excited about what the Malware Analysis Centre brings to your learning experience. The Centre provides you with opportunities to develop and exercise your skills in acquiring, identifying, analysing, and eradicating malware from infected equipment, using advanced industry technologies and processes from leading companies in the field.

3. Malware analysis is a critical step in the cyber incident response process. The analysis of malware, how it works, can provide important information about how the effects on a device, how to detect it, and how to keep it out or recover from it.

4. Malware evolves with time. Cyber threat actors are constantly refining and customising existing malware and devising new ones to exploit vulnerabilities in an ever-expanding array of apps, devices and platforms. Given this reality, cyber professionals must stay nimble and keep up with their adversaries. You must also learn to anticipate changes and look out for emerging trends, not just when you are in training, but as an essential part of your professional practice. This will keep you engaged and challenged throughout your journey in this field.

5. And your journey will be a sustained one. The global cybersecurity market is expected to grow by almost 60 per cent, from about US\$170 billion in 2020 to US\$270 billion in 2026. The size and speed of growth of the market mean that there is a pressing



demand for the kind of hands-on knowledge and skills that you will be developing and applying at the Malware Analysis Centre by supporting real walk-in clients with their cybersecurity issues. It is useful training and preparation for a meaningful career. In addition to honing your technical skills, your experience at the Centre will also equip you with valuable soft skills such as working in teams, peer leadership, effective communication, problem-solving and creativity. Soon, I hope you will join the growing community of cybersecurity professionals in defending our digital space against cyber threats. Your cause will be safeguarding national security, facilitating the digital economy, and protecting our digital way of life.

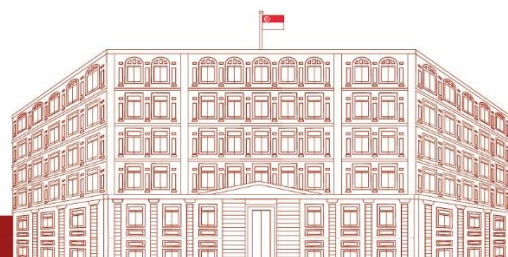
6. The Malware Analysis Centre is the first of its kind in Southeast Asia that allows students to support walk-in clients. On the one hand, it means that you are getting access to these opportunities ahead of your peers in other educational institutions. On the other hand, it also means you are a pioneer venturing into a new way of learning. Other educational institutions will be watching you to see how viable and feasible this Centre turns out, which may determine whether they seek to emulate TP and provide their own students with similar opportunities. No pressure intended, but I hope that you take this challenge of being the pioneer cohort in the right spirit, and recognise that your efforts and that of every subsequent cohort are essential in helping to make the Centre a success.

Nurturing cybersecurity talent is a strategic priority

7. To the staff of TP, I commend you for the initiative in setting up the Centre. Your work contributes directly and substantively to Singapore's goal of growing a robust cyber talent pipeline.

8. TP has been a steadfast partner in Singapore's effort in educating and developing a strong cybersecurity workforce. Since 2019, the Cyber Security Agency of Singapore (CSA) has been partnering TP and other partners to organise the Youth Cyber Exploration Program bootcamps. At these bootcamps, TP trains secondary school student participants on the fundamentals of cybersecurity. These efforts contribute towards CSA's SG Cyber Youth initiative, which aims to reach out to our youths to develop an interest in and hone their cyber skills, and encourage them to pursue cybersecurity as a career.

9. Singapore has made significant progress in expanding the size of our cybersecurity workforce. We have almost doubled the number of cybersecurity



professionals from 2018 to 2020, from around 6,000 to around 11,000. TP's efforts have contributed to this.

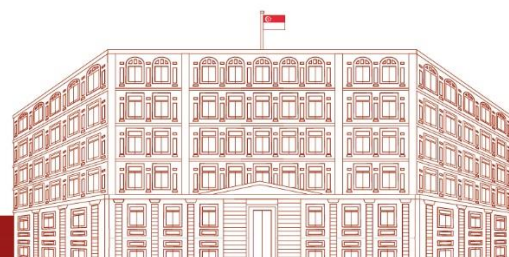
10. Even so, we still have not caught up with the great demand for cybersecurity professionals. This is not a problem unique to Singapore, but a challenge that countries around the world also face. An accelerating pace of digitalisation, exacerbated by the COVID-19 pandemic, an ever-evolving cyber threat landscape, and a greater likelihood of cyber disruptions causing physical, real-world impact all point to the need for a bigger and more capable pool of cybersecurity professionals. A shortage of cybersecurity professionals remains the top constraint in organisations' efforts to meet their security needs.

11. This is why TP's efforts towards nurturing cybersecurity talent are so important.

Public-private partnership is a win-win proposition

12. Finally, I would like to address our industry partners in attendance today. I believe you see the bigger picture and the need to grow and develop the cybersecurity professionals of the future. Cybersecurity spending in the Asia Pacific is expected to outpace the global average. The demand in the region for malware analysts and other cybersecurity experts is likely to surge in tandem. Thank you for sharing your resources, best practices and experience in the field with TP and its students. By doing so, you bring valuable credibility to the whole effort. Students and staff alike can be confident in the knowledge that the work they do at the Malware Analysis Centre, the processes and procedures they practise, and the technology that they handle, are relevant and aligned to industry standards.

13. Ultimately, cybersecurity is a team sport, and everyone brings something valuable to the table. By working together, the public-private partnership that makes the Malware Analysis Centre a reality is a win-win proposition. Students stand to gain an experiential and practical education. Companies get to recruit from a bigger and more rigorously trained pool of candidates in the future, which will in turn facilitate the growth of their businesses regionally and internationally. At the end of the day, all of us benefit from this robust talent pipeline that will build a trusted and resilient cyberspace.



14. Let me congratulate all of you once again on this significant milestone. It is exciting to contemplate the potential of what the students and staff of TP are embarking on alongside ST Engineering, CrowdStrike, and Palo Alto Networks. I hope that this catalyses other meaningful partnerships between educational institutions and industry partners that will enhance the size, capability and dynamism of our cybersecurity workforce. With the passion of our youth, the commitment of our educators, and the professionalism that our industry partners bring to the table, I am confident that Singapore's cybersecurity ecosystem has a bright future.

15. Thank you.

