

Training Course on ITU International Standards: Data Protection (X.1220/X.nspam) and Passwordless Authentication (X.1280)

Summary

This training program provides a comprehensive three-day curriculum on two international security standards—Storage Protection (X.1220/X.nspam) and Passwordless Authentication (X.1280)—along with related free software for use in healthcare institutions and B2C online service environments.

Participants will gain both theoretical knowledge and practical experience in storage protection technologies that defend against ransomware and data exfiltration, as well as passwordless authentication technologies that prevent phishing attacks. The program ensures that participants acquire hands-on skills applicable to real-world environments. (Non-developers can also participate in the Day 1 and Day 2 morning practical sessions.)

Program Objectives

- Storage Protection (X.1220/X.nspam): Understand and apply storage security technologies that prevent data tampering and leakage caused by ransomware and malware.
- Passwordless Authentication (X.1280): Understand and apply passwordless mutual authentication technologies that protect user accounts from phishing attacks.
- Experiential Learning: Strengthen competencies in data and account protection by directly installing and integrating Storage Protection Software (for data security) and Passwordless X1280 software (for account security).

Prerequisites

- All participants are required to bring their own individual laptop, with Windows 11 recommended. Training will primarily be based on Windows. MacOS is not recommended. Specific requirements are:
 - OS: Windows 10 or Windows 11
 - RAM: 16 GB or higher
 - Storage: 100 GB or more of available disk space
- All participants are required to bring their own smartphones.
- All participants will need to create a GitHub user account.

Administrative Information

- More information on the content, including the registration link, invitation letter and the logistics information note, can be found at the [event link here](#).¹

Agenda

Day 1 (11 February 2025)	
09:00 – 09:30	Registration
09:30 – 10:00	Opening Remarks <ul style="list-style-type: none">TBC, ITU (Video, TBC)Mr. Kihun Kim, Director of Center, Global Standards Collaboration Center, Telecommunications Technology Association (TTA)Mr. Jonghyun Woo, President, Passwordless Alliance
10:00 – 11:00	Theory of Storage Protection for Preventing Data Exfiltration and Responding to Ransomware <ul style="list-style-type: none">Passwordless Alliance <p>This session will feature the following activities:</p> <ul style="list-style-type: none">Understanding international storage protection standards X.1220 and X.nspamIntroduction to X.1220 and X.nspam technologiesOverview of the ProtectMedicalData Initiative and global collaborationsDemonstration and hands-on experience with folder-level storage protection software and application-level storage protection software
11:00 – 11:15	Coffee Break
11:15 – 12:30	Theory of Storage Protection for Preventing Data Exfiltration and Responding to Ransomware (cont). <ul style="list-style-type: none">Passwordless Alliance
12:30 – 13:30	Lunch Break
13:30 – 15:00	Practice of Storage Protection for Preventing Data Exfiltration and Responding to Ransomware <ul style="list-style-type: none">Passwordless Alliance <p>This session will feature the following activities:</p>

¹ https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Pages/Events/2026/02_Interregional%20Training%20Course%20on%20ITU%20International%20Standards/Interregional-Training-Course-on-Standards.aspx

- Understanding administrative functions of Application-level Storage Protection (FilingBox MEGA) and Folder-level Storage Protection (FilingBox GIGA)
- Demonstration and hands-on operation of Storage Protection Software
- Introduction to data protection methods using Storage Protection Software
- Installation training for Storage Protection Software (Docker & installation packages)

15:00 – 15:15	Coffee Break
15:15 – 17:00	Hands-on Implementation of International Storage Protection Standards (Cont.) <ul style="list-style-type: none">• Passwordless Alliance

Day 2 (12 February 2025)

09:30 – 10:30	Overview and Theory of Passwordless Authentication Based on International Standards <ul style="list-style-type: none">• Passwordless Alliance <p>This session will feature the following activities:</p> <ul style="list-style-type: none">• Introduction to the international standard X.1280• Overview of the Passwordless Alliance and global collaborations• User-level experience with Passwordless X1280
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10:30 – 10:45	Coffee Break
10:45 – 12:30	Application of Passwordless Authentication Based on International Standards <ul style="list-style-type: none">• Passwordless Alliance <p>This session will feature the following activities:</p> <ul style="list-style-type: none">• Team formation and AWS environment setup• Understanding X.1280 server architecture and Docker image installation training• Reviewing sample code on GitHub and preparing the environment• Hands-on practice session

12:30 – 13:30	Lunch Break
13:30 – 15:00	Application of Passwordless Authentication Based on International Standards (Cont.) <ul style="list-style-type: none">• Passwordless Alliance

15:00 – 15:15	Coffee Break
15:15 – 17:00	Application of Passwordless Authentication Based on International Standards (Cont.) <ul style="list-style-type: none">• Passwordless Alliance

Day 3 (13 February 2025)

09:30 – 10:45	Advanced Configuration and Practical Application of Passwordless X1280
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- Passwordless Alliance

This session will feature the following activities:

- Configuring and testing the Passwordless X1280 server
- Integrating the mobile app with the server
- Connecting sample services to the Passwordless X1280 server
- Running user registration and approval scenarios

10:45 – 11:00	Coffee Break
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10:45 – 12:30	Advanced Configuration and Practical Application of Passwordless X1280 (Cont.)
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- Passwordless Alliance

12:30 – 13:30	Lunch Break
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13:30 – 15:00	Group Project: Designing a “Targeted Model Combining Storage Protection + Passwordless Authentication”
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- Passwordless Alliance

This session will feature the following activities:

- Team presentations and discussions
- Instructor feedback & Q&A
- Program summary, evaluation, and completion ceremony

15:00 – 15:15	Coffee Break
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15:15 – 16:15	Group Project: Designing a “Targeted Model Combining Storage Protection + Passwordless Authentication” (Cont.)
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- Passwordless Alliance

16:15 – 16:30	Closing Remarks
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- TBC, ITU

- Mr. Jonghyun Woo, President, Passwordless Alliance