Australian Government

DEFFOR006 Conduct electronic data search and analysis

Release: 1

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Modification History

Release	Comments
1	This unit was released in DEF Defence Training Package release 1.0 and meets the Standards for Training Packages.

Application

This unit covers the competency to analyse electronic forensic data that has been acquired through a range of electronic forensic methodologies. It includes analysing electronic storage devices for artefacts that may become evidence. In the context of this unit, physical evidence includes both digital and analogue recording, and communications equipment including hard drives, recording media, flash drives, tape drives, random-access memory (RAM), read-only memory (ROM), basic input/output system (BIOS) and other peripherals. In addition, artefacts are any kind of tangible electronic byproducts that are produced during user or system activity.

This unit applies to those working in the gathering and analysis of electronic information.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to, particularly those relating to WHS and the conducting of electronic data search and analysis.

Those undertaking this unit would work independently, with minimal supervision, while performing complex tasks, including making complex judgements. They would use discretion and judgement and take responsibility for the quality of their outputs.

No licensing, legislative or certification requirements apply to unit at the time of publication.

Competency Field

Electronic Forensics

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.

1. Reduce and describe data	1.1 Identify electronic forensic data to be analysed. 1.2 Reduce the data, identify possible artefacts and describe these in a suitable form to support the development of interpretations. 1.3 Decrypt data if appropriate. 1.4 Review the reduction and description processes to determine their appropriateness, and make improvements where necessary. 1.5 Save data not used in the reduction and description processes for future reference.
2. Analyse and interpret data	2.1 Interpret the data using appropriate thinking processes based on deduction, induction and/or problem solving techniques. 2.2 Analyse electronic storage devices for artefacts, i.e. any kind of tangible electronic byproduct produced during user or system activity that may become evidence. 2.3 Apply sound reasoning to ensure consistency of interpretations based on the data. 2.4 Base interpretations on the factual quantitative and qualitative data. 2.5 Develop a reconstruction of events using analysis techniques.
3. Develop conclusions and recommendations	3.1 Test and review possible interpretations to ensure they are credible and consistent with relevant data. 3.2 Refine and consolidate interpretations to strengthen inferences drawn. 3.3 Clearly state assumptions in the arguments leading to inferences. 3.4 Formulate sound inferences, probable predictions, interpretations and/or explanations from facts and the tested interpretations. 3.5 Ensure transparency in the investigation process by formulating inferences through a clear chain of reasoning. 3.6 Review inferences to identify and address any fallacies in reasoning. 3.7 Assess the relationship between the data developed and the probable interpretations to ensure validity and compliance, and report orally and/or in writing, formally or informally. 3.8 Develop and report conclusions and recommendations, addressing both strategic and tactical issues.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning					Reading					Writing					Oral communication					Numeracy N/A					

Performance variables

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9

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