



**Australian Government**

# **Assessment Requirements for ICPPTD303 Set up and produce 3D scans**

**Release: 1**

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## Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

## Performance Evidence

The candidate must demonstrate they can perform the following according to the standards defined in the elements, performance criteria and foundation skills of this unit.

The candidate must demonstrate the ability to produce at least two 3D scans in accordance with work health and safety requirements and workplace procedures to meet required outcomes. This includes demonstrating the ability to:

- communicate with client to identify needs
- determine scan requirements from client specifications and object criteria
- select an appropriate scanner and prepare the surface of the object
- prepare the scanner and orientate the object effectively
- scan the object safely and efficiently
- create files from scanner to client specifications.

## Knowledge Evidence

The candidate must be able to demonstrate the following knowledge to effectively complete the tasks outlined in the elements and performance criteria of this unit, and to manage tasks in the context of the work role:

- common three-dimensional (3D) scanner technologies and their respective applications, capabilities and limitations
- current industries where 3D scanning is used
- workplace procedures and safety requirements when using 3D scanners
- importance of adjusting or considering scale, units of measurement, calibration, distance from subject, tolerance, and resolution for efficient 3D scans
- output file types for various applications, including but not limited to, the following file extensions:
  - STL - standard triangle language/standard tessellation language file format
  - OBJ - geometry definition file format
  - PLY - polygon file format

- VRML - virtual reality modelling language file format
- XYZ/PTX - point cloud file formats
- AMF - additive manufacturing file format
- file conversion process required to prepare files for various applications
- intellectual property and copyright laws and requirements in relation to 3D printing.
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## Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing and graphic arts field of work and include access to:

- a 3D model
- a 3D scanner
- specifications for scanner output files
- organisational and manufacturer operating procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>