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Australian Standard®

**Computer graphics—Programmer's
hierarchical interactive graphics
system (PHIGS)**

Part 2: Archive file format

[ISO/IEC title: Information Processing Systems—Programmer's
Hierarchical Interactive Graphics System (PHIGS)—Part 2: Archive
File Format]



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Part 2: Archive file format

First published as AS 3732.2—1990.

PREFACE

This Standard was prepared by the Standards Australia Committee on Computer Related Graphics. It is identical with, and has been reproduced from International Standard ISO/IEC 9592-2: 1989, *Information processing systems—Computer graphics—Programmer's Hierarchical Interactive Graphics System (PHIGS)—Part 2: Archive File Format*.

For the purpose of this Australian Standard, the text of the ISO/IEC Standard should be modified as follows:

- (a) **Terminology**—The words 'Australian Standard' should replace the words 'International Standard' wherever they apply.
- (b) **References**—The references to International Standards should be replaced by references to Australian Standards as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISO	AS
8632 Information processing systems—Computer graphics—Metafiles for transfer and storage of picture description information	3603 Computer graphics—Metafiles for transfer and storage of picture description information
Part 1: Functional specifications	Part 1: Functional specifications
Part 2: Character encoding	Part 2: Character encoding
Part 3: Binary encoding	Part 3: Binary encoding
Part 4: Clear-text encoding	Part 4: Clear-text encoding

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Computer graphics—Programmer's hierarchical interactive graphics system (PHIGS)—Part 2: Archive file format

0 Introduction

0.1 Purpose

The PHIGS archive file provides a file format suitable for the storage and retrieval of PHIGS structure and structure network definitions. The file format consists of a set of elements that represent structure elements in a way that is compatible between systems of different architectures and devices of differing capabilities and design.

0.2 Reasons for this part of ISO/IEC 9592

The main reasons for producing a standard PHIGS archive file are

- a) to allow structure definitions to be stored in an organized way on a graphical software system;
- b) to facilitate transfer of structure definitions between different graphical software systems;
- c) to enable structure definitions to be transferred between different computer graphics installations.

0.3 Design requirements

To reach these objectives, a number of design principles were adopted:

- a) The archive file should provide a suitable set of elements for the storage of structure definitions.
- b) The archive file should support all elements required by ISO/IEC 9592-1.
- c) The design of the archive file should not preclude extensions at a later stage to cover further facilities provided in future revisions of ISO/IEC 9592-1.
- d) The archive file design should allow formats which address the needs of different application programs that have conflicting requirements for size of archive file, speed of archival and retrieval, readability, editability and ease of transfer through different transport mechanisms.

0.4 Design criteria

The following design criteria have been adopted in order to meet the design requirements listed above.