

Distributed Resource Management Application API Version 2 (DRMAA) Errata

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1 Introduction

The Distributed Resource Management Application API Version 2 (DRMAA) was published in January 2012 as GFD.194 [2] in the OGF document standardization process. Based on this document, the DRMAA working group developed the first language binding specification for C.

The creation of this language binding and a reference implementation lead to the identification of several minor technical flaws in the GFD.194 document. In adherence to the Open Grid Forum document process [1], this document serves as errata report for fixes necessary in the root specification.

Implementors of DRMAA need to have both the root specification and some language binding specification before they can start their work. For this reason, we see no danger of having multiple different versions of GFD.194 being used by different people after the application of the fixes.

2 Errata

Section 4.1, page 9

The term **TRUE64** is changed to **TRU64** at three occasions.

Section 4.1, page 10

The term **TRUE64** is changed to **TRU64** at one occasion.

Section 4.2, page 10

The enumeration of CPU architectures is extended with the following entries:

ARM64, PARISC64, MIPS64

Section 4.2, page 11

The description of the following CPU architectures is modified:

- *ARM*: The ARM processor architecture, all models with 32bit support only.
- *PARISC*: The PA-RISC processor architecture, all models with 32bit support only.
- *MIPS*: The MIPS processor architecture, all models with 32bit support only.

The description of CPU architectures is extended with the following entries:

- *ARM64*: The ARM processor architecture, all models with 64bit support.
- *PARISC64*: The PA-RISC processor architecture, all models with 64bit support.
- *MIPS64*: The MIPS processor architecture, all models with 64bit support.

Table 3 is extended with entries for ARM64, PARISC64 and MIPS64. The JSDL mappings are the same as for the 32-bit counterparts of these architectures.

Section 4.3, page 12

`DATA_SEG_SIZE` is renamed to `DATA_SIZE` at two occasions.

The description of this attribute is modified in the following way:

- *DATA_SIZE*: The maximum amount of memory the job can allocate for initialized data, uninitialized data and heap space.

Section 5.7.25, page 28

`DATA_SEG_SIZE` is renamed to `DATA_SIZE`.

Section 8.2.7, page 42

The following two sentences are removed without replacement:

The largest (syntactically) allowed value for `endIndex` MUST be defined by the language binding.

Further restrictions on the maximum `endIndex` MAY be implied by the implementation.

Section 8.4, page 44

The return type of `waitStarted` and `waitTerminated` is changed from `Job` to `void`.

Section 11, page 51

The term `TRUE64` is changed to `TRU64`. `DATA_SEG_SIZE` is renamed to `DATA_SIZE`.

The enumeration `CpuArchitecture` is extended with the entries `ARM64`, `PARISC64` and `MIPS64`.

Section 11, page 56

The return type of `waitStarted` and `waitTerminated` is changed from `Job` to `void`.

3 Contributors

This errata is a collaborative effort of the DRMAA working group. Special thanks go to Rayson Ho for the initial identification of most of these issues.

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7 References

- [1] Charlie Catlett, Cees de Laat, David Martin, Gregory Newby, and Dane Skow. Open Grid Forum Document Process and Requirements. <http://www.ogf.org/documents/GFD.152.pdf>, June 2009.
- [2] Peter Tröger, Roger Brobst, Daniel Gruber, Mariusz Mamonski, and Daniel Templeton. Distributed Resource Management Application API Version 2 (DRMAA). <http://www.ogf.org/documents/GFD.194.pdf>, January 2012.