



Consideration on Removing the Term Master/Slave from S-57



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Introduction/Background



The relationship term “master/slave” as an object relationship definition is outdated.

In the light of recent global events, the United States asks for consideration of a revision to the use of such terminology within IHO documentation standards, particularly within S-57 and associated standards such as S-58.

Background - GitHub



The code-hosting portal is just the latest in a long line of tech companies and open source projects that have expressed support for removing terms that may be offensive to developers in the black community.

This includes dropping terms like "master" and "slave" for alternatives like "main/default/primary" and "secondary;" but also terms like "blacklist" and "whitelist" for "allow list" and "deny/exclude list."

Background - Johns Hopkins University Press



In November 2003, after receiving a discrimination complaint from a county employee, the Los Angeles County Office of Affirmative Action Compliance sent a memo to all its equipment vendors asking that they stop using the words “master” and “slave” in reference to computer hardware and other equipment.

Broken Metaphor: The Master-Slave Analogy in Technical Literature

Johns Hopkins University Press

Volume 48, Number 2, April 2007

pp. 360-369

<https://muse.jhu.edu/article/215390/summary>

Background - Wikipedia



Following the controversy, Global Language Monitor found the term "master/slave" to be the most egregious example of political incorrectness in 2004, and named it the most politically incorrect term of that year.

In 2018, Python replaced the term, after a heated debate. Many developers in the discussion on whether to make the replacement agreed that the term "slave" should be replaced while "master" was not offensive, while others argued that changing "slave" was also unnecessary.

There was similarly contentious debate among developers when Django and Drupal (in 2014) and Redis (in 2017) replaced the term.

[https://en.wikipedia.org/wiki/Master/slave_\(technology\)](https://en.wikipedia.org/wiki/Master/slave_(technology))

Wikipedia



Suggested Replacements

- Different phrases have been adopted to replace existing usage of the phrase. Some examples include:
- “Primary/Secondary”
 - In December 2017, the [Internet Systems Consortium](#) decided to allow the words "primary" and "secondary" as a substitute for master/slave terminology in their DNS server software [BIND](#).^[10]
- “Primary/Replica”
 - In May 2014, [Django](#) replaced "master/slave" with "leader/follower" in its documentation, and then within two days replaced that with "primary/replica".
 - In June 2014, [Drupal](#) replaced "master/slave" with "primary/replica", drawing inspiration from Django.^[15]
- “Master/Replica” - [Engine Yard](#)^[18] and [Redis](#)^[19]
- “Source/Replica” In July 2020, [MySQL](#) announced that it would replace "master/slave" with "source/replica" in future releases.
- “Master/Standby” - [PostgreSQL](#)
- “Master/Minion” - [Salt](#)
- In 2018, Python replaced uses of the term "master" variously with “Main”, "parent", and “Server”; and "slave" with “Worker”, "child", and "Helper", depending on the context.

Alternative Replacement Term Ideas - Brainstorm



Master

- Parent
- Leader
- Main
- Agency
- Hive
- Conductor
- Captain
- Guide
- *Master

Slave

- Child
- Follower
- Secondary
- Operative
- Drone
- Worker
- Node
- Handler
- Mason
- Steward
- Doer
- Coordinator

Are any of these words
offensive when translated
to other languages?

Others?

Impacts



- No impact to end users of standards, ENC data producers, ECDIS manufactures or users.
- Changes would be clarifications of meaning only and result in more modern and neutral terminology replacing outdated language.
- Fits with direction of IHO Assembly resolutions on gender-neutral language.

1. During a discussion at the 3rd IHO Council meeting on amendments to an Article of the General Regulations, it was noted that IHO documentation lacks a consistency in the application of "gender-neutral" language. [This proposal will forthwith adopt the UN term, "gender-inclusive language".] Given the soon-to-be 100-year existence of the organization and the great number of documents in the IHO collection, this is not a surprise, but neither should this be considered to cast a poor light on the Organization given the sizable evolvement of social norms over that period. In fact, a preliminary analysis of the English version of Basic Documents and the IHO Resolution (Annex B), finds relatively few cases of gender-specific pronouns and possessives i.e. 'he' 'him', 'his'.

2. However, as the IHO enters its second century, it is time for the Organization to set a path to ensure, starting with its language, that gender equity is promoted and supported. It is a small step that the IHO can take to support the UN Sustainable Development Goal 5: Gender Equality (Ref C). The UN states the following (Ref. B.):

Impacts



- Primary IHO documents requiring consideration:

- ❖ IHO Transfer Standard S-57 (Edition 3.1.0, November 2000) Main Document – *15 references*
- ❖ Appendix B.1 - ENC Product Specification – *4 references*
- ❖ Appendix B.1, Annex A - Use of the Object Catalogue for ENC - UOC – *36 references*
- ❖ S-58- ENC Validation Checks – *39 references*

*Note - This terminology is also present in the S-101 Data Classification and Encoding Guide.

Action Required of ENCWG



United States and IIC Technologies will supply the redline version for comments at the next ENCWG meeting.

The ENCWG is invited to:

- A. Endorse this consideration
- B. Comment on suggested replacement terminology
- C. Approve start of a redline version for affected documents