

H5edit COPY and RENAME Commands

Proposed by Albert Cheng

1 Purpose

This describes the requirements and design of the COPY and RENAME commands of the H5edit tool. Section 2 lists the function requirements of the two commands. Section 2 shows some examples of the commands.

2 Requirement Specifications

In this section, I will describe the functionality of the COPY and the RENAME commands of the H5edit tool.

2.1 COPY Command

This command creates an exact copy of an existing attribute under a different name.

2.1.1 Command Syntax

```
COPY <old_attribute_name> <new_attribute_name>
```

2.1.2 Function Definition

Upon a successful execution of the command, an attribute with the `new_attribute_name` is created and is a duplicate of the existing attribute with the `old_attribute_name`. The values of the two attributes are separated, that is, any modification to the value of one attribute does not affect the value of the other attribute.

2.2 RENAME Command

This command changes the name of an existing attribute to a different name.

2.2.1 Command Syntax

```
RENAME <old_attribute_name> <new_attribute_name>
```

2.2.2 Function Definition

Upon a successful execution of the command, the `old_attribute_name` of an existing attribute is changed to the `new_attribute_name`. The `old_attribute_name` is no longer valid. The value of the attribute with the `new_attribute_name` is exactly the same as the `old_attribute_name`.

3 Examples:

3.1 Examples of the COPY Command

3.1.1 COPY /group1/dataset1 attribute1 /group1/dataset2 attribute2_new;

A copy of attribute1 of /group1/dataset1 is created with the name as attribute2_new of /group1/dataset2. Both attributes exist as two separated attributes.

3.1.2 COPY /group1/dataset1/attribute1 /group1/dataset2/attribute2_new;

Same effect as the previous example.

3.1.3 COPY /group1/dataset1/attribute1 attribute1_new;

A copy of attribute1 of /group1/dataset1 is created with the name as attribute1_new of the same /group1/dataset1. Both attributes exist as two separated attributes of the same dataset.

3.1.4 COPY /group1/dataset1/attribute1 /group1/dataset1/attribute1_new;

Same as the previous example.

3.1.5 COPY /group1/dataset1 attribute1 /group1/dataset1 attribute1_new;

Same as the previous example.

3.2 Examples of the RENAME Command

3.2.1 RENAME /group1/dataset1 attribute1 attribute2;

attribute1 of /group1/dataset1 becomes attribute2 of /group1/dataset1. Attribute1 does not exist any more.

3.2.2 RENAME /group1/dataset1/attribute1 attribute2;

Same effect as the previous example.

3.2.3 RENAME /group1/dataset1/attribute1 /group1/dataset1/attribute2;

This is illegal because the <new_attributename> should be an attribute name, not as a full path name.

Revision History

Date	Revisions
2013-02-25	Rev 2: Examples added.
2012-12-10	Rev 1: Requirements Specification defined.