

# Restore Version Control Workflow

*Note some manual editing was used to keep whitespace in the top namespace tag.*

Read in the old and new xml files and revert back to the older version. First commit.

```
old <- xml2::read_xml("https://raw.githubusercontent.com/
NCEAS/eml/82dd0dd4178e27097f15813bb2c4d15f526e814b/
eml-unitDictionary.xml",
options = NULL)
xml2::write_xml(old, "eml-unitDictionary.xml")

new <- xml2::read_xml("https://raw.githubusercontent.com/
NCEAS/eml/0ef141f327369d73f487fa269441209d946c2dc0/
eml-unitDictionary.xml")
```

Update deprecatedInFavorOf fields. Second commit

```
##### Get xml children #####
new_children <- xml2::xml_children(new)
old_children <- xml2::xml_children(old)

##### Get the unit ids #####
new_ids <- lapply(seq_along(new_children), function(i) {
  list <- xml2::as_list(new_children[i])
  id <- attr(list[[1]], "id")
  deprecatedInFavorOf <- attr(list[[1]], "deprecatedInFavorOf")
  deprecatedInFavorOf <- ifelse(is.null(deprecatedInFavorOf), NA, deprecatedInFavorOf)
  data.frame(i, id, deprecatedInFavorOf, stringsAsFactors = F)
})
new_ids <- do.call(rbind, new_ids)

old_ids <- lapply(seq_along(old_children), function(i) {
  list <- xml2::as_list(old_children[i])
  id <- attr(list[[1]], "id")
  data.frame(i, id, stringsAsFactors = F)
})
old_ids <- do.call(rbind, old_ids)

##### Find which units were deprecated and/or new #####
deprecated_units <- new_ids[!is.na(new_ids$deprecatedInFavorOf),]
deprecated_units <- deprecated_units[, c("id", "deprecatedInFavorOf")]
deprecated_units <- dplyr::left_join(deprecated_units, old_ids, "id")

new_units <- new_ids[!(new_ids$id %in% old_ids$id),]

##### Update deprecated units #####
for (i in deprecated_units$i) {
  xml2::xml_set_attr(old_children[i], "deprecatedInFavorOf",
    deprecated_units[deprecated_units$i == i, "deprecatedInFavorOf"])
}

##### write eml-unitDictionary #####
xml2::write_xml(old, "eml-unitDictionary.xml")
```

Add new units. Third commit.

```
##### add new units #####
old_lines <- readLines(file("eml-unitDictionary.xml"))

for (i in new_units$i) {

x <- paste0(new_children[i])
x <- gsub("<stmml:", "<", x)
x <- gsub("</stmml:", "</", x)
x <- gsub("/>", ">\n <description></description>\n</unit>", x)

x <- strsplit(x, "\n")
x <- lapply(x, function(y) {paste0(" ", y)})
x[[1]][length(x[[1]])+1] = ""

old_lines <- c(old_lines, x[[1]])
}

writeLines(old_lines, file("eml-unitDictionary.xml"))
```