

Ethiopic Unicode to MZU Entities (3.1.5)

Works on selection(s). If there is no selection, the whole document will be converted.

When the whole document is converted, the macro will save the frontmost document as a temporary file and convert it. If the original document has unsaved changes, you will be asked how to proceed: "Save & Continue" or "Ignore & Continue" (ignore unsaved changes which will be lost). If you want to stop the macro, hit "Stop Macro" button.

When `$changeFont` is set to 'true', the converted text will be in the font defined as `$newFont` (you can use your favourite font by changing the font name). To disable the changement, set `$changeFont` to 'false'.

```
$changeFont = true # true: change font; false: not change font  
$newFont = 'Courier'
```

Require Application Version '3.1'

```
$doc = Document.active
```

```
$startTime = Date.now
```

```
$Uni2MZUEnt = Hash.new
```

```
$Uni2MZUEnt{0x1200} = '&ha;'
```

```
$Uni2MZUEnt{0x1201} = '&hu;'
```

```
$Uni2MZUEnt{0x1202} = '&hi;'
```

```
$Uni2MZUEnt{0x1203} = '&hA;'
```

```
$Uni2MZUEnt{0x1204} = '&he;'
```

```
$Uni2MZUEnt{0x1205} = '&hj;'
```

```
$Uni2MZUEnt{0x1206} = '&ho;'
```

```
$Uni2MZUEnt{0x1208} = '&la;'
```

```
$Uni2MZUEnt{0x1209} = '&lu;'
```

```
$Uni2MZUEnt{0x120A} = '&li;'
```

```
$Uni2MZUEnt{0x120B} = '&lA;'
```

```
$Uni2MZUEnt{0x120C} = '&le;'
```

```
$Uni2MZUEnt{0x120D} = '&lj;'
```

```
$Uni2MZUEnt{0x120E} = '&lo;'
```

```
$Uni2MZUEnt{0x120F} = '&lWa;'
```

```
$Uni2MZUEnt{0x1210} = '&Ha;'
```

\$Uni2MZUEnt{0x1211} = '&Hu;'
\$Uni2MZUEnt{0x1212} = '&Hi;'
\$Uni2MZUEnt{0x1213} = '&HA;'
\$Uni2MZUEnt{0x1214} = '&He;'
\$Uni2MZUEnt{0x1215} = '&Hj;'
\$Uni2MZUEnt{0x1216} = '&Ho;'
\$Uni2MZUEnt{0x1217} = '&HWA;'
\$Uni2MZUEnt{0x1218} = '&ma;'
\$Uni2MZUEnt{0x1219} = 'μ'
\$Uni2MZUEnt{0x121A} = '&mi;'
\$Uni2MZUEnt{0x121B} = '&mA;'
\$Uni2MZUEnt{0x121C} = '&me;'
\$Uni2MZUEnt{0x121D} = '&mj;'
\$Uni2MZUEnt{0x121E} = '&mo;'
\$Uni2MZUEnt{0x121F} = '&mWA;'
\$Uni2MZUEnt{0x1220} = '&Ma;'
\$Uni2MZUEnt{0x1221} = 'Μ'
\$Uni2MZUEnt{0x1222} = '&Mi;'
\$Uni2MZUEnt{0x1223} = '&MA;'
\$Uni2MZUEnt{0x1224} = '&Me;'
\$Uni2MZUEnt{0x1225} = '&Mj;'
\$Uni2MZUEnt{0x1226} = '&Mo;'
\$Uni2MZUEnt{0x1227} = '&MWA;'
\$Uni2MZUEnt{0x1228} = '&ra;'
\$Uni2MZUEnt{0x1229} = '&ru;'
\$Uni2MZUEnt{0x122A} = '&ri;'
\$Uni2MZUEnt{0x122B} = '&rA;'
\$Uni2MZUEnt{0x122C} = '&re;'
\$Uni2MZUEnt{0x122D} = '&rj;'
\$Uni2MZUEnt{0x122E} = '&ro;'
\$Uni2MZUEnt{0x122F} = '&rWA;'
\$Uni2MZUEnt{0x1230} = '&sa;'
\$Uni2MZUEnt{0x1231} = '&su;'
\$Uni2MZUEnt{0x1232} = '&si;'
\$Uni2MZUEnt{0x1233} = '&sA;'
\$Uni2MZUEnt{0x1234} = '&se;'

\$Uni2MZUEnt{0x1235} = '&sj;'
\$Uni2MZUEnt{0x1236} = '&so;'
\$Uni2MZUEnt{0x1237} = '&sWA;'
\$Uni2MZUEnt{0x1238} = '&Sa;'
\$Uni2MZUEnt{0x1239} = '&Su;'
\$Uni2MZUEnt{0x123A} = '&Si;'
\$Uni2MZUEnt{0x123B} = '&SA;'
\$Uni2MZUEnt{0x123C} = '&Se;'
\$Uni2MZUEnt{0x123D} = '&Sj;'
\$Uni2MZUEnt{0x123E} = '&So;'
\$Uni2MZUEnt{0x123F} = '&SWA;'
\$Uni2MZUEnt{0x1240} = '&qa;'
\$Uni2MZUEnt{0x1241} = '&qu;'
\$Uni2MZUEnt{0x1242} = '&qi;'
\$Uni2MZUEnt{0x1243} = '&qA;'
\$Uni2MZUEnt{0x1244} = '&qe;'
\$Uni2MZUEnt{0x1245} = '&qj;'
\$Uni2MZUEnt{0x1246} = '&qo;'
\$Uni2MZUEnt{0x1248} = '&qWa;'
\$Uni2MZUEnt{0x124A} = '&qWi;'
\$Uni2MZUEnt{0x124B} = '&qWA;'
\$Uni2MZUEnt{0x124C} = '&qWe;'
\$Uni2MZUEnt{0x124D} = '&qWj;'
\$Uni2MZUEnt{0x1250} = '&Qa;'
\$Uni2MZUEnt{0x1251} = '&Qu;'
\$Uni2MZUEnt{0x1252} = '&Qi;'
\$Uni2MZUEnt{0x1253} = '&QA;'
\$Uni2MZUEnt{0x1254} = '&Qe;'
\$Uni2MZUEnt{0x1255} = '&Qj;'
\$Uni2MZUEnt{0x1256} = '&Qo;'
\$Uni2MZUEnt{0x1258} = '&QWa;'
\$Uni2MZUEnt{0x125A} = '&QWi;'
\$Uni2MZUEnt{0x125B} = '&QWA;'
\$Uni2MZUEnt{0x125C} = '&QWe;'
\$Uni2MZUEnt{0x125D} = '&QWj;'
\$Uni2MZUEnt{0x1260} = '&ba;'

\$Uni2MZUEnt{0x1261} = '&bu;'
\$Uni2MZUEnt{0x1262} = '&bi;'
\$Uni2MZUEnt{0x1263} = '&bA;'
\$Uni2MZUEnt{0x1264} = '&be;'
\$Uni2MZUEnt{0x1265} = '&bj;'
\$Uni2MZUEnt{0x1266} = '&bo;'
\$Uni2MZUEnt{0x1267} = '&bWa;'
\$Uni2MZUEnt{0x1268} = '&Ba;'
\$Uni2MZUEnt{0x1269} = '&Bu;'
\$Uni2MZUEnt{0x126A} = '&Bi;'
\$Uni2MZUEnt{0x126B} = '&BA;'
\$Uni2MZUEnt{0x126C} = '&Be;'
\$Uni2MZUEnt{0x126D} = '&Bj;'
\$Uni2MZUEnt{0x126E} = '&Bo;'
\$Uni2MZUEnt{0x126F} = '&BWa;'
\$Uni2MZUEnt{0x1270} = '&ta;'
\$Uni2MZUEnt{0x1271} = '&tu;'
\$Uni2MZUEnt{0x1272} = '&ti;'
\$Uni2MZUEnt{0x1273} = '&tA;'
\$Uni2MZUEnt{0x1274} = '&te;'
\$Uni2MZUEnt{0x1275} = '&tj;'
\$Uni2MZUEnt{0x1276} = '&to;'
\$Uni2MZUEnt{0x1277} = '&tWA;'
\$Uni2MZUEnt{0x1278} = '&Ta;'
\$Uni2MZUEnt{0x1279} = '&Tu;'
\$Uni2MZUEnt{0x127A} = '&Ti;'
\$Uni2MZUEnt{0x127B} = '&TA;'
\$Uni2MZUEnt{0x127C} = '&Te;'
\$Uni2MZUEnt{0x127D} = '&Tj;'
\$Uni2MZUEnt{0x127E} = '&To;'
\$Uni2MZUEnt{0x127F} = '&TWA;'
\$Uni2MZUEnt{0x1280} = '&Xa;'
\$Uni2MZUEnt{0x1281} = '&Xu;'
\$Uni2MZUEnt{0x1282} = 'Ξ'
\$Uni2MZUEnt{0x1283} = '&XA;'
\$Uni2MZUEnt{0x1284} = '&Xe;'

\$Uni2MZUEnt{0x1285} = '&Xj;'
\$Uni2MZUEnt{0x1286} = '&Xo;'
\$Uni2MZUEnt{0x1288} = '&XWq;'
\$Uni2MZUEnt{0x128A} = '&XWi;'
\$Uni2MZUEnt{0x128B} = '&XWA;'
\$Uni2MZUEnt{0x128C} = '&XWe;'
\$Uni2MZUEnt{0x128D} = '&XWj;'
\$Uni2MZUEnt{0x1290} = '&na;'
\$Uni2MZUEnt{0x1291} = 'ν'
\$Uni2MZUEnt{0x1292} = '∋'
\$Uni2MZUEnt{0x1293} = '&nA;'
\$Uni2MZUEnt{0x1294} = '≠'
\$Uni2MZUEnt{0x1295} = '&nj;'
\$Uni2MZUEnt{0x1296} = '&no;'
\$Uni2MZUEnt{0x1298} = '&Na;'
\$Uni2MZUEnt{0x1299} = 'Ν'
\$Uni2MZUEnt{0x129A} = '&Ni;'
\$Uni2MZUEnt{0x129B} = '&NA;'
\$Uni2MZUEnt{0x129C} = '&Ne;'
\$Uni2MZUEnt{0x129D} = '&Nj;'
\$Uni2MZUEnt{0x129E} = '&No;'
\$Uni2MZUEnt{0x12A0} = '&Ea;'
\$Uni2MZUEnt{0x12A1} = '&Eu;'
\$Uni2MZUEnt{0x12A2} = '&Ei;'
\$Uni2MZUEnt{0x12A3} = '&EA;'
\$Uni2MZUEnt{0x12A4} = '&Ee;'
\$Uni2MZUEnt{0x12A5} = '&Ej;'
\$Uni2MZUEnt{0x12A6} = '&Eo;'
\$Uni2MZUEnt{0x12A8} = '&ka;'
\$Uni2MZUEnt{0x12A9} = '&ku;'
\$Uni2MZUEnt{0x12AA} = '&ki;'
\$Uni2MZUEnt{0x12AB} = '&kA;'
\$Uni2MZUEnt{0x12AC} = '&ke;'
\$Uni2MZUEnt{0x12AD} = '&kj;'
\$Uni2MZUEnt{0x12AE} = '&ko;'
\$Uni2MZUEnt{0x12B0} = '&kWq;'

\$Uni2MZUEnt{0x12B0} = '&kWa;'
\$Uni2MZUEnt{0x12B2} = '&kWi;'
\$Uni2MZUEnt{0x12B3} = '&kWA;'
\$Uni2MZUEnt{0x12B4} = '&kWe;'
\$Uni2MZUEnt{0x12B5} = '&kWj;'
\$Uni2MZUEnt{0x12B8} = '&Ka;'
\$Uni2MZUEnt{0x12B9} = '&Ku;'
\$Uni2MZUEnt{0x12BA} = '&Ki;'
\$Uni2MZUEnt{0x12BB} = '&KA;'
\$Uni2MZUEnt{0x12BC} = '&Ke;'
\$Uni2MZUEnt{0x12BD} = '&Kj;'
\$Uni2MZUEnt{0x12BE} = '&Ko;'
\$Uni2MZUEnt{0x12C0} = '&KWa;'
\$Uni2MZUEnt{0x12C2} = '&KWi;'
\$Uni2MZUEnt{0x12C3} = '&KWA;'
\$Uni2MZUEnt{0x12C4} = '&KWe;'
\$Uni2MZUEnt{0x12C5} = '&KWa;'
\$Uni2MZUEnt{0x12C8} = '&wa;'
\$Uni2MZUEnt{0x12C9} = '&wu;'
\$Uni2MZUEnt{0x12CA} = '&wi;'
\$Uni2MZUEnt{0x12CB} = '&wA;'
\$Uni2MZUEnt{0x12CC} = '&we;'
\$Uni2MZUEnt{0x12CD} = '&wj;'
\$Uni2MZUEnt{0x12CE} = '&wo;'
\$Uni2MZUEnt{0x12D0} = '&Oa;'
\$Uni2MZUEnt{0x12D1} = '&Ou;'
\$Uni2MZUEnt{0x12D2} = '&Oi;'
\$Uni2MZUEnt{0x12D3} = '&OA;'
\$Uni2MZUEnt{0x12D4} = '&Oe;'
\$Uni2MZUEnt{0x12D5} = '&Oj;'
\$Uni2MZUEnt{0x12D6} = '&Oo;'
\$Uni2MZUEnt{0x12D8} = '&za;'
\$Uni2MZUEnt{0x12D9} = '&zu;'
\$Uni2MZUEnt{0x12DA} = '&zi;'
\$Uni2MZUEnt{0x12DB} = '&zA;'
\$Uni2MZUEnt{0x12DC} = '&ze;'

\$Uni2MZUEnt{0x12DD} = '&zj;'
\$Uni2MZUEnt{0x12DE} = '&zo;'
\$Uni2MZUEnt{0x12DF} = '&zWA;'
\$Uni2MZUEnt{0x12E0} = '&Za;'
\$Uni2MZUEnt{0x12E1} = '&Zu;'
\$Uni2MZUEnt{0x12E2} = '&Zi;'
\$Uni2MZUEnt{0x12E3} = '&ZA;'
\$Uni2MZUEnt{0x12E4} = '&Ze;'
\$Uni2MZUEnt{0x12E5} = '&Zj;'
\$Uni2MZUEnt{0x12E6} = '&Zo;'
\$Uni2MZUEnt{0x12E7} = '&ZWA;'
\$Uni2MZUEnt{0x12E8} = '&ya;'
\$Uni2MZUEnt{0x12E9} = '&yu;'
\$Uni2MZUEnt{0x12EA} = '&yi;'
\$Uni2MZUEnt{0x12EB} = '&yA;'
\$Uni2MZUEnt{0x12EC} = '&ye;'
\$Uni2MZUEnt{0x12ED} = '&yj;'
\$Uni2MZUEnt{0x12EE} = '&yo;'
\$Uni2MZUEnt{0x12F0} = '&da;'
\$Uni2MZUEnt{0x12F1} = '&du;'
\$Uni2MZUEnt{0x12F2} = '&di;'
\$Uni2MZUEnt{0x12F3} = '&dA;'
\$Uni2MZUEnt{0x12F4} = '&de;'
\$Uni2MZUEnt{0x12F5} = '&dj;'
\$Uni2MZUEnt{0x12F6} = '&do;'
\$Uni2MZUEnt{0x12F7} = '&dWA;'
\$Uni2MZUEnt{0x1300} = '&Da;'
\$Uni2MZUEnt{0x1301} = '&Du;'
\$Uni2MZUEnt{0x1302} = '&Di;'
\$Uni2MZUEnt{0x1303} = '&DA;'
\$Uni2MZUEnt{0x1304} = '&De;'
\$Uni2MZUEnt{0x1305} = '&Dj;'
\$Uni2MZUEnt{0x1306} = '&Do;'
\$Uni2MZUEnt{0x1307} = '&DWA;'
\$Uni2MZUEnt{0x1308} = '&ga;'
\$Uni2MZUEnt{0x1309} = '&gu;'

\$Uni2MZUEnt{0x130A} = '&gi;'
\$Uni2MZUEnt{0x130B} = '&gA;'
\$Uni2MZUEnt{0x130C} = '≥'
\$Uni2MZUEnt{0x130D} = '&gj;'
\$Uni2MZUEnt{0x130E} = '&go;'
\$Uni2MZUEnt{0x1310} = '&gWa;'
\$Uni2MZUEnt{0x1312} = '&gWi;'
\$Uni2MZUEnt{0x1313} = '&gWA;'
\$Uni2MZUEnt{0x1314} = '&gWe;'
\$Uni2MZUEnt{0x1315} = '&gWj;'
\$Uni2MZUEnt{0x1320} = '&ca;'
\$Uni2MZUEnt{0x1321} = '&cu;'
\$Uni2MZUEnt{0x1322} = '&ci;'
\$Uni2MZUEnt{0x1323} = '&cA;'
\$Uni2MZUEnt{0x1324} = '&ce;'
\$Uni2MZUEnt{0x1325} = '&cj;'
\$Uni2MZUEnt{0x1326} = '&co;'
\$Uni2MZUEnt{0x1327} = '&cWA;'
\$Uni2MZUEnt{0x1328} = '&Ca;'
\$Uni2MZUEnt{0x1329} = '&Cu;'
\$Uni2MZUEnt{0x132A} = '&Ci;'
\$Uni2MZUEnt{0x132B} = '&CA;'
\$Uni2MZUEnt{0x132C} = '&Ce;'
\$Uni2MZUEnt{0x132D} = '&Cj;'
\$Uni2MZUEnt{0x132E} = '&Co;'
\$Uni2MZUEnt{0x132F} = '&CWA;'
\$Uni2MZUEnt{0x1330} = '&Pa;'
\$Uni2MZUEnt{0x1331} = '&Pu;'
\$Uni2MZUEnt{0x1332} = 'Π'
\$Uni2MZUEnt{0x1333} = '&PA;'
\$Uni2MZUEnt{0x1334} = '&Pe;'
\$Uni2MZUEnt{0x1335} = '&Pj;'
\$Uni2MZUEnt{0x1336} = '&Po;'
\$Uni2MZUEnt{0x1338} = '&xa;'
\$Uni2MZUEnt{0x1339} = '&xu;'
\$Uni2MZUEnt{0x133A} = 'ξ'


```
$Uni2MZUEnt{0x133B} = '&xA;'  
$Uni2MZUEnt{0x133C} = '&xe;'  
$Uni2MZUEnt{0x133D} = '&xj;'  
$Uni2MZUEnt{0x133E} = '&xo;'  
$Uni2MZUEnt{0x133F} = '&xWA;'  
$Uni2MZUEnt{0x1340} = '&Ga;'  
$Uni2MZUEnt{0x1341} = '&Gu;'  
$Uni2MZUEnt{0x1342} = '&Gi;'  
$Uni2MZUEnt{0x1343} = '&GA;'  
$Uni2MZUEnt{0x1344} = '&Ge;'  
$Uni2MZUEnt{0x1345} = '&Gj;'  
$Uni2MZUEnt{0x1346} = '&Go;'  
$Uni2MZUEnt{0x1348} = '&fa;'  
$Uni2MZUEnt{0x1349} = '&fu;'  
$Uni2MZUEnt{0x134A} = '&fi;'  
$Uni2MZUEnt{0x134B} = '&fA;'  
$Uni2MZUEnt{0x134C} = '&fe;'  
$Uni2MZUEnt{0x134D} = '&fj;'  
$Uni2MZUEnt{0x134E} = '&fo;'  
$Uni2MZUEnt{0x134F} = '&fWA;'  
$Uni2MZUEnt{0x1350} = '&pa;'  
$Uni2MZUEnt{0x1351} = '&pu;'  
$Uni2MZUEnt{0x1352} = '&pi;'  
$Uni2MZUEnt{0x1353} = '&pA;'  
$Uni2MZUEnt{0x1354} = '&pe;'  
$Uni2MZUEnt{0x1355} = '&pj;'  
$Uni2MZUEnt{0x1356} = '&po;'  
$Uni2MZUEnt{0x1358} = '&rWi;'  
$Uni2MZUEnt{0x1359} = '&mWa;'  
$Uni2MZUEnt{0x135E} = '&nWA;'  
$Uni2MZUEnt{0x1361} = '&aeth_worttr;'  
$Uni2MZUEnt{0x1362} = '&aeth_punkt;'  
$Uni2MZUEnt{0x1363} = '&aeth_komma;'  
$Uni2MZUEnt{0x1364} = '&aeth_semikolon;'  
$Uni2MZUEnt{0x1369} = '&digit1;'  
$Uni2MZUEnt{0x136A} = '&digit2;'
```

```
$Uni2MZUEnt{0x136B} = '&digit3;'  
$Uni2MZUEnt{0x136C} = '&digit4;'  
$Uni2MZUEnt{0x136D} = '&digit5;'  
$Uni2MZUEnt{0x136E} = '&digit6;'  
$Uni2MZUEnt{0x136F} = '&digit7;'  
$Uni2MZUEnt{0x1370} = '&digit8;'  
$Uni2MZUEnt{0x1371} = '&digit9;'  
$Uni2MZUEnt{0x1372} = '&digit10;'  
$Uni2MZUEnt{0x1373} = '&digit20;'  
$Uni2MZUEnt{0x1374} = '&digit30;'  
$Uni2MZUEnt{0x1375} = '&digit40;'  
$Uni2MZUEnt{0x1376} = '&digit50;'  
$Uni2MZUEnt{0x1377} = '&digit60;'  
$Uni2MZUEnt{0x1378} = '&digit70;'  
$Uni2MZUEnt{0x1379} = '&digit80;'  
$Uni2MZUEnt{0x137A} = '&digit90;'  
$Uni2MZUEnt{0x137B} = '&digit100;'  
$Uni2MZUEnt{0x137C} = '&digit10000;'
```

```
$allDocument = false
```

```
if ! $doc.textSelection.length # if there is no selection of 1 or more  
characters...
```

```
    Select All Document
```

```
    $allDocument = true
```

```
end
```

```
if $allDocument == true
```

```
    $path = $pathCopy = $doc.filePath
```

```
    if $path == undefined
```

```
        $pathCopy = '/tmp/unsavedfile.rtf'
```

```
    elseif $doc.hasChanges
```

```
        $message = 'This document has unsaved changes.'
```

```
        $detail = 'If you choose "Ignore & Continue", unsaved changes will not be  
lost from this document.'
```

```
        $defaultButton = 'Save & Continue'
```

```
        $otherButton = 'Ignore & Continue'
```

```

        $userInput = Prompt $message, $detail, $defaultButton, $otherButton
        if $userInput == $defaultButton
            Save
        end
    end
    $fileName = $pathCopy.lastFilePathComponentWithoutExtension
    Set Exported Perl Variables 'fileName'
    begin Perl
        $fileName =~ s/^(converted\)(?:-\d+)?$//;
    end
    $fileName &= '(converted).'
    $fileName &= $pathCopy.filePathExtension
    $tempfilePath = File.temporaryPathWithName $fileName
    Save As $tempfilePath
    $doc.clearAndDisableUndoHistory
end

$numFound = Find All '\p{Any}+', 'Es' # Find All Any character to exclude note
references

if $changeFont == true
    Set Font Name $newFont
end

$selections = $doc.textSelections # get the selections and put them in $selections
(array)

foreach $sel in reversed $selections # process each selection ($sel) in
$selections one by one in reverse order
    $sel.text.transliterateInRange $sel.range, $Uni2MZUEnt # transliterate $sel
using $Uni2MZUEnt
end

if $allDocument == true
    $finishTime = Date.now
    $seconds = $finishTime.secondsSinceUnixEpoch -

```

```

$startTime.secondsSinceUnixEpoch
    $message = 'Finished in '
    $minutes = Cast to Int $seconds / 60, false
    if $minutes
        $message &= "$minutes m "
    end
    $seconds = $seconds % 60
    $message &= "$seconds s ($numFound segments)"
    $detail = 'This is a temporary file. If you want to keep it, save it somewhere
in your home.'
    if $path == undefined
        Prompt $message, $detail
    else
        $defaultButton = 'Do nothing'
        $otherButton = 'Open the original'
        $userInput = Prompt $message, $detail, $defaultButton, $otherButton
        if $userInput == $otherButton
            Open $path
        end
    end
end
end

```

end of macro