Function Create\_Rules(line\_index)

Application.ScreenUpdating = False

Sheets("STM").Select

i\_row = Range("A65535").End(xlUp).Row + 3

j\_col = Range("IV4").End(xlToLeft).Column

Line = line\_index

profile\_name = Cells(1, 4).Value

For j = 3 To j\_col

For i = 6 To i\_row Step 4

If Cells(i, j) <> "" Then

'Deffunction

If Cells(i + 2, j) <> "" Then

Sheets("source").Cells(Line, 1).Value = "(deffunction " & Cells(i + 2, j).Value & " ( )"

Line = Line + 1

Sheets("source").Cells(Line, 1).Value = Application.VLookup(Cells(i + 2, j).Value, Worksheets("action").Range("A:C"), 3, 0)

Line = Line + 1

Sheets("source").Cells(Line, 1).Value = ")"

Line = Line + 2

End If

End If

Next

Next

Create\_Rules = Line

End Function

Function Create\_Deffunction(line\_index)

Application.ScreenUpdating = False

Sheets("STM").Select

i\_row = Range("A65535").End(xlUp).Row + 3

j\_col = Range("IV4").End(xlToLeft).Column

Line = line\_index

profile\_name = Cells(1, 4).Value

For j = 3 To j\_col

For i = 6 To i\_row Step 4

If Cells(i, j) <> "" Then

Sheets("source").Cells(Line, 1).Value = "(defrule " & profile\_name & "\_" & Cells(i, j).Value

Line = Line + 1

'LHS

Sheets("source").Cells(Line, 1).Value = Application.VLookup(Cells(i, 1).Value, Worksheets("Event").Range("A:C"), 3, 0)

Line = Line + 1

Sheets("source").Cells(Line, 1).Value = " ?state <- (" & profile\_name & "State (state " & Cells(4, j).Value & "))"

Line = Line + 1

Sheets("source").Cells(Line, 1).Value = " => "

Line = Line + 1

'Guard

If Cells(i + 1, j) <> "" Then

gurad\_exps = "(if (" & Cells(i + 1, j).Value & ") then"

Else

gurad\_exps = "(if TRUE then"

End If

Sheets("source").Cells(Line, 1).Value = gurad\_exps

Line = Line + 1

'Action

If Cells(i + 2, j) <> "" Then

Sheets("source").Cells(Line, 1).Value = "(" & Cells(i + 2, j).Value & ")"

Line = Line + 1

End If

'State Trans

If Cells(i + 3, j) <> "" Then

Sheets("source").Cells(Line, 1).Value = " (modify ?state (state " & Cells(i + 3, j).Value & "))"

Line = Line + 1

End If

Sheets("source").Cells(Line, 1).Value = ")"

Line = Line + 1

Sheets("source").Cells(Line, 1).Value = ")"

Line = Line + 2

End If

Next

Next

Create\_Deffunction = Line

End Function

Sub Create\_CLIPS()

profile\_name = Sheets("STM").Cells(1, 4).Value

l = 1

Sheets("source").Cells(l, 1).Value = " (deftemplate " & profile\_name & "State "

l = l + 1

Sheets("source").Cells(l, 1).Value = "(slot state (type SYMBOL) (default S0)))"

l = l + 2

l = Create\_Rules(l)

l = Create\_Deffunction(l)

Sheets("source").Select

End Sub

Sub Add\_GuardDetail()

Application.ScreenUpdating = False

Sheets("STM").Select

i\_row = Range("A65535").End(xlUp).Row + 3

j\_col = Range("IV4").End(xlToLeft).Column

k = 2

For j = 3 To j\_col

For i = 7 To i\_row Step 4

If Cells(i, j) <> "" Then

Sheets("guard").Cells(k, 1).Value = Cells(i, j).Value

Cells(i, j).Select

ActiveSheet.Hyperlinks.Add Anchor:=Selection, Address:="", SubAddress:="guard!" & Sheets("guard").Cells(k, 1).Address, TextToDisplay:=Cells(i, j).Value

k = k + 1

End If

Next

Next

Application.ScreenUpdating = True

End Sub

Sub Add\_ActionDetail()

Application.ScreenUpdating = False

Sheets("STM").Select

i\_row = Range("A65535").End(xlUp).Row + 3

j\_col = Range("IV4").End(xlToLeft).Column

k = 2

For j = 3 To j\_col

For i = 8 To i\_row Step 4

If Cells(i, j) <> "" Then

Sheets("action").Cells(k, 1).Value = Cells(i, j).Value

Cells(i, j).Select

ActiveSheet.Hyperlinks.Add Anchor:=Selection, Address:="", SubAddress:="action!" & Sheets("action").Cells(k, 1).Address, TextToDisplay:=Cells(i, j).Value

k = k + 1

End If

Next

Next

Application.ScreenUpdating = True

End Sub

Sub Add\_EventDetail()

Application.ScreenUpdating = 0

Sheets("STM").Select

i = Range("A65535").End(xlUp).Row

j = 2

For k = 6 To i Step 4

Sheets("Event").Cells(j, 1).Value = Sheets("STM").Cells(k, 1)

Sheets("Event").Cells(j, 2).Value = Sheets("STM").Cells(k, 2)

Cells(k, 1).Select

ActiveSheet.Hyperlinks.Add Anchor:=Selection, Address:="", SubAddress:="Event!" & Sheets("Event").Cells(j, 1).Address, TextToDisplay:=Cells(k, 1).Value

j = j + 1

Next

Call Add\_GuardDetail

Call Add\_ActionDetail

Application.ScreenUpdating = 1

End Sub

Sub Add\_Event()

Application.ScreenUpdating = 0

i = Range("A65535").End(xlUp).Row + 3

j = Range("IV4").End(xlToLeft).Column

If i < 5 Then

i = 5

Cells(i + 1, 1).Value = "e" & CStr(i - 5)

End If

Cells(i + 1, 1).Value = "e" & CStr((i - 5) / 4)

Union(Cells(i + 1, 1), Cells(i + 2, 1), Cells(i + 3, 1), Cells(i + 4, 1)).Select

With Selection

.HorizontalAlignment = xlCenter

.VerticalAlignment = xlCenter

.WrapText = False

.Orientation = 0

.AddIndent = False

.IndentLevel = 0

.ShrinkToFit = False

.ReadingOrder = xlContext

.MergeCells = False

End With

Selection.Merge

Selection.Borders(xlDiagonalDown).LineStyle = xlNone

Selection.Borders(xlDiagonalUp).LineStyle = xlNone

With Selection.Borders(xlEdgeLeft)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

With Selection.Borders(xlEdgeTop)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

With Selection.Borders(xlEdgeBottom)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

With Selection.Borders(xlEdgeRight)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

Cells(i + 1, 2).Value = "event"

Union(Cells(i + 1, 2), Cells(i + 2, 2), Cells(i + 3, 2), Cells(i + 4, 2)).Select

With Selection

.HorizontalAlignment = xlCenter

.VerticalAlignment = xlCenter

.WrapText = False

.Orientation = 0

.AddIndent = False

.IndentLevel = 0

.ShrinkToFit = False

.ReadingOrder = xlContext

.MergeCells = False

End With

Selection.Merge

Selection.Borders(xlDiagonalDown).LineStyle = xlNone

Selection.Borders(xlDiagonalUp).LineStyle = xlNone

With Selection.Borders(xlEdgeLeft)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

With Selection.Borders(xlEdgeTop)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

With Selection.Borders(xlEdgeBottom)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

With Selection.Borders(xlEdgeRight)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

For k = 3 To j

Cells(i + 1, k).Value = "Rule Name"

Cells(i + 1, k).Select

With Selection

.HorizontalAlignment = xlCenter

.VerticalAlignment = xlCenter

.WrapText = False

.Orientation = 0

.AddIndent = False

.IndentLevel = 0

.ShrinkToFit = False

.ReadingOrder = xlContext

.MergeCells = False

End With

With Selection.Interior

.Pattern = xlSolid

.PatternColorIndex = xlAutomatic

.ThemeColor = xlThemeColorAccent1

.TintAndShade = 0.799981688894314

.PatternTintAndShade = 0

End With

Cells(i + 2, k).Value = "guard"

Cells(i + 2, k).Select

With Selection

.HorizontalAlignment = xlCenter

.VerticalAlignment = xlCenter

.WrapText = False

.Orientation = 0

.AddIndent = False

.IndentLevel = 0

.ShrinkToFit = False

.ReadingOrder = xlContext

.MergeCells = False

End With

With Selection.Interior

.Pattern = xlSolid

.PatternColorIndex = xlAutomatic

.ThemeColor = xlThemeColorAccent5

.TintAndShade = 0.799981688894314

.PatternTintAndShade = 0

End With

Cells(i + 3, k).Value = "action"

Cells(i + 3, k).Select

With Selection

.HorizontalAlignment = xlCenter

.VerticalAlignment = xlCenter

.WrapText = False

.Orientation = 0

.AddIndent = False

.IndentLevel = 0

.ShrinkToFit = False

.ReadingOrder = xlContext

.MergeCells = False

End With

With Selection.Interior

.Pattern = xlSolid

.PatternColorIndex = xlAutomatic

.ThemeColor = xlThemeColorAccent2

.TintAndShade = 0.799981688894314

.PatternTintAndShade = 0

End With

Cells(i + 4, k).Value = "S0"

Cells(i + 4, k).Select

With Selection

.HorizontalAlignment = xlCenter

.VerticalAlignment = xlCenter

.WrapText = False

.Orientation = 0

.AddIndent = False

.IndentLevel = 0

.ShrinkToFit = False

.ReadingOrder = xlContext

.MergeCells = False

End With

With Selection.Interior

.Pattern = xlSolid

.PatternColorIndex = xlAutomatic

.ThemeColor = xlThemeColorAccent3

.TintAndShade = 0.799981688894314

.PatternTintAndShade = 0

End With

Union(Cells(i + 1, k), Cells(i + 2, k), Cells(i + 3, k), Cells(i + 4, k)).Select

Selection.Borders(xlDiagonalDown).LineStyle = xlNone

Selection.Borders(xlDiagonalUp).LineStyle = xlNone

With Selection.Borders(xlEdgeLeft)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlMedium

End With

With Selection.Borders(xlEdgeTop)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlMedium

End With

With Selection.Borders(xlEdgeBottom)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlMedium

End With

With Selection.Borders(xlEdgeRight)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlMedium

End With

Selection.Borders(xlInsideVertical).LineStyle = xlNone

With Selection.Borders(xlInsideHorizontal)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

Next

Application.ScreenUpdating = 1

End Sub

Sub Add\_State()

Application.ScreenUpdating = 0

i = Range("A65535").End(xlUp).Row

j = Range("IV4").End(xlToLeft).Column

'MsgBox i

'MsgBox j

start\_column = 3

start\_row = 4

If j = 1 Then

Cells(start\_row, start\_column).Value = "S0"

j = start\_column - 1

Else

Cells(start\_row, j + 1).Value = "S" & Right(Cells(start\_row, j), Len(Cells(start\_row, j)) - 1) + 1

End If

Cells(start\_row + 1, j + 1).Value = InputBox(prompt:="忬懺柤傪擖椡偟偰偔偩偝偄", Default:="忬懺柤")

Union(Cells(start\_row, j + 1), Cells(start\_row + 1, j + 1)).Select

With Selection

.HorizontalAlignment = xlCenter

.VerticalAlignment = xlCenter

.WrapText = False

.Orientation = 0

.AddIndent = False

.IndentLevel = 0

.ShrinkToFit = False

.ReadingOrder = xlContext

.MergeCells = False

End With

Selection.Borders(xlDiagonalDown).LineStyle = xlNone

Selection.Borders(xlDiagonalUp).LineStyle = xlNone

With Selection.Borders(xlEdgeLeft)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlMedium

End With

With Selection.Borders(xlEdgeTop)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlMedium

End With

With Selection.Borders(xlEdgeBottom)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlMedium

End With

With Selection.Borders(xlEdgeRight)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlMedium

End With

Selection.Borders(xlInsideVertical).LineStyle = xlNone

With Selection.Borders(xlInsideHorizontal)

.LineStyle = xlContinuous

.ColorIndex = xlAutomatic

.TintAndShade = 0

.Weight = xlThin

End With

With Selection.Interior

.Pattern = xlSolid

.PatternColorIndex = xlAutomatic

.ThemeColor = xlThemeColorAccent6

.TintAndShade = 0.599963377788629

.PatternTintAndShade = 0

End With

Application.ScreenUpdating = 1

End Sub