



LVM REINDENTATION TOOL

Version 1.01 (April 2025)





Overview

Overview

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About LVM Reindentation Tool

WHAT IS Reindentation Tool FROM LVM

- System Verilog and UVM File Reindentation Tool that can reindent the file with configurable indent size.

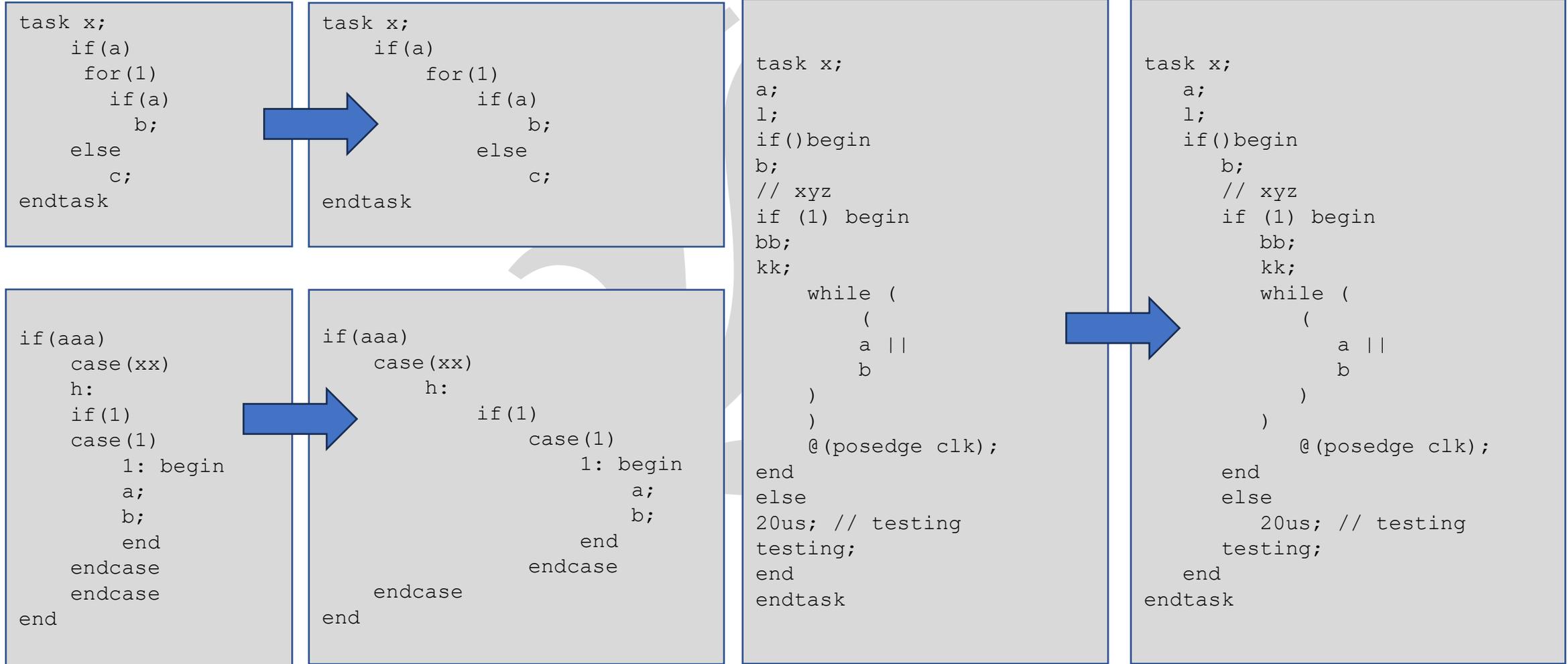
OBJECTIVE OF LVM Reindentation Tool

- To help user to reindent the system verilog / UVM testbench / RTL files so that it is tidy, easy to read and avoid confusion.





Before AND After of Reindentation Tool





Before AND After of Reindentation Tool

```
if(a)
if(b)
if(c)
    1;
else
    2;
```



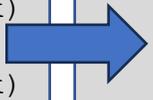
```
if(a)
    if(b)
        if(c)
            1;
    else
        2;
```

```
interface #
(
.a(1),
.b(1)
)
(
input a,
input b
);
    a;
    b;
endinterface
```



```
interface #
(
    .a(1),
    .b(1)
)
(
    input a,
    input b
);
    a;
    b;
endinterface
```

```
`ifdef A
always @(posedge clk)
`else
always @(negedge clk)
`endif
testing;
```



```
`ifdef A
always @(posedge clk)
`else
always @(negedge clk)
`endif
    testing;
```

```
if(
(
    a &&
    b
)
||
(
    c &&
    d
)
&&
a
&&
b
)
testing;
```



```
if(
(
    (
        a &&
        b
    )
||
(
    c &&
    d
)
)
&&
a
&&
b
)
testing;
```

```
for /* TODO */ (
a;
f;
b /* TODO */
) begin
aaa; // if
bbb; // begin
end
```



```
for /* TODO */ (
    a;
    f;
    b /* TODO */
) begin
    aaa; // if
    bbb; // begin
end
```





Before AND After of Reindentation Tool

```
repeat (10)
  while ()
    aaa;

  if() `uvm_info()
  else `uvm_error()
```

```
repeat (10)
  while ()
    aaa;

  if() `uvm_info()
  else `uvm_error()
```

```
class ex_trial extends trial;
function display();
super.display();
$display ("0x%0h", value);
endfunction;

function new();
super.new ();
endfunction
endclass
```

```
class ex_trial extends trial;
function display();
super.display();
$display ("0x%0h", value);
endfunction;

function new();
super.new ();
endfunction
endclass
```

```
sequence ev_B;
@(posedge clk)
B == 0;
endsequence
```

```
sequence ev_B;
@(posedge clk)
B == 0;
endsequence
```

```
`define AAA () \
if(aaa)\
if(bbb)\
```

```
`define AAA () \
if(aaa)\
  if(bbb)\
```

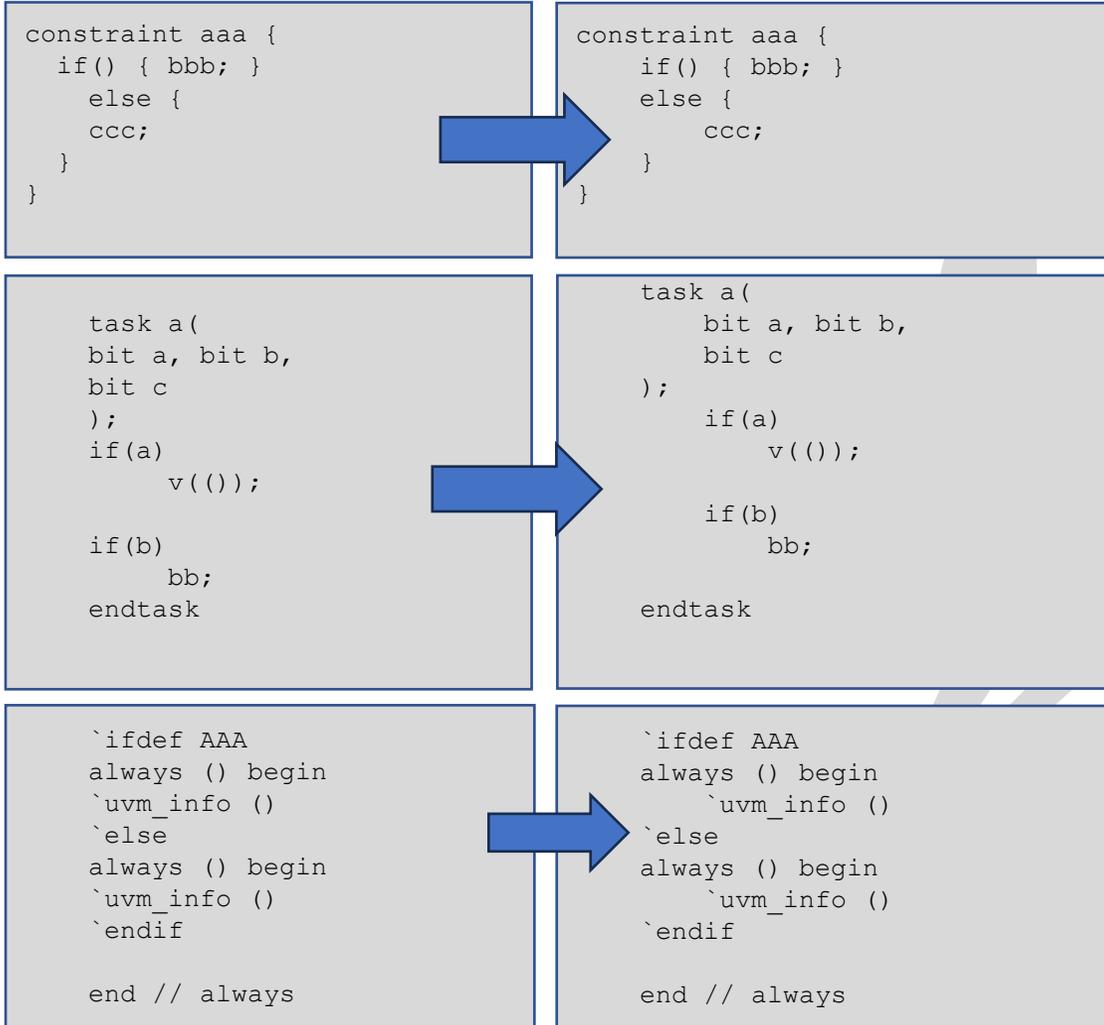
```
case()
a: begin
  kkk;
end
b: lll;
c: begin kkk; end
d: begin
  kkk;
end
e:
  lll;
f:
  if(1)
  2;
g:
  for(1)
    2;
h:
  for(1)
    case(1)
      1: begin
        a;
        b;
      end
    endcase
i:
  `uvm_info()
j:
  `uvm_info( if ()
)
k:
  case(x)
    h:
      for(1) 2;
    i:
      `uvm_info()
  endcase
endcase
```

```
case()
a: begin
  kkk;
end
b: lll;
c: begin kkk; end
d: begin
  kkk;
end
e:
  lll;
f:
  if(1)
    2;
g:
  for(1)
    2;
h:
  for(1)
    case(1)
      1: begin
        a;
        b;
      end
    endcase
i:
  `uvm_info()
j:
  `uvm_info( if ()
)
k:
  case(x)
    h:
      for(1) 2;
    i:
      `uvm_info()
  endcase
endcase
```





Before AND After of Reindentation Tool



```
fork  
begin  
    if()  
        b;  
    for() c;  
end  
begin  
a;  
end  
for()  
a;  
if(a) begin  
d;  
e;  
end  
`uvm_info(asd)  
`uvm_info(asd  
)  
test;  
fork  
fork  
a;  
b;  
join  
begin xx; end  
begin  
repeat(3) g;  
end  
  
repeat(3) g;  
  
repeat(3)  
g;  
join  
join
```



```
fork  
begin  
    if()  
        b;  
    for() c;  
end  
begin  
a;  
end  
for()  
a;  
if(a) begin  
d;  
e;  
end  
`uvm_info(asd)  
`uvm_info(asd  
)  
test;  
fork  
fork  
a;  
b;  
join  
begin xx; end  
begin  
repeat(3) g;  
end  
  
repeat(3) g;  
  
repeat(3)  
g;  
join  
join
```





Steps to Integrate LVM Reindentation Tool

Step 1: Request a copy of LVM Reindentation tool from LVM (developer@lvmvip.com) while mentioning what is your EDA tool (vcs/xrun/irun/vsim)

Step 2: Copy the LVM Reindentation tool files to your bin / script area

```
cp <downloaded path>/lvm_reindentation <your bin / script area>  
cp <downloaded path>/lvm_reindent.pl <your bin / script area>  
chmod -R 755 <your bin / script area>/lvm_reindent*
```

Step 3: Modify the `lvm_reindent.pl`, by filling `<fill your path here>/lvm_reindentation`,

```
Before      : <fill your path here>/lvm_reindentation  
After       : <your bin / script area>/lvm_reindentation  
For example: /usr/bin/lvm_reindentation
```

Step 4: Execute the tool

indent size

Filename

Reindent on
original file

```
<your bin / scripts area>/lvm_reindent.pl -ts 4 -f <your sv file> -replace
```



Terms and Conditions

IMPORTANT NOTICE

LVM reserves the right to make changes without further notice to any product or specifications herein.

LVM does not assume any responsibility for use of any its products for any particular purpose, nor does LVM assume any liability arising out of the application or use of any its products.





About LVM VIP

1. At LVM, our mission is to enhance the performance and efficiency of design verification work in the industry by providing ultra-high-quality, low-cost VIPs. We offer a range of AMBA VIPs and serial VIPs, including:
AXI4 / AXI4-LITE, AHB, APB, TCM, USART, JTAG, AXI Stream
2. To learn more about our services, please contact us at developer@lvmvip.com.
3. You can also visit our LinkedIn page at <https://www.linkedin.com/in/lvm-vip-3444b21b5/>

