



There are several files need to be changed in order to add a new IR node. Following list the files according to the directory name.

## HalideIR/src/ir

- `Expr.h`: Add the new IR node name here in the enum list.
- `IR.h`: Define the new IR node here. You can inherit from either `ExprNode` or `StmtNode`
- `IR.cpp`: Implement the `make` function for IR node. Also, add the corresponding `accept` method at the end of the file.
- `IRMutator.h`, `IRMutator.cpp`: Add the corresponding `visit` method for `IRMutator`.
- `IRVisitor.h`, `IRVisitor.cpp`: Add the corresponding `visit` methods for `IRVisitor` and `IRGraphVisitor`.
- `IRPrinter.cpp`: Add the output string for the IR node.

## tvm/include/tvm

- `ir.h`: Add the reference to the added Halide IR node.
- `ir_visitor.h`, `ir_mutator.h`: Add the corresponding `visit` methods.
- `ir_functor_ext.h`: Add the corresponding `visit` method. This one is more general in that you can have an arbitrary number of arguments.

## tvm/python/tvm

- `expr.py` or `stmt.py`: Register the IR node here.

## tvm/src

- `api/api_ir.cc`: Register the API for the `make` method of the node.
- `lang/ir.cc`: Register the IR node type.
- `pass/ir_mutator.cc`, `pass/ir_visitor.cc`: Implement the corresponding `visit` methods.
- `codegen/llvm/codegen_llvm.h`, `codegen/llvm/codegen.cc`: Declare and implement the codegen for LLVM.

## Discussion