syntax = "proto3";

package tensorflow;

import "tensorflow/core/framework/function.proto";

import "tensorflow/core/framework/node\_def.proto";

import "tensorflow/core/framework/versions.proto";

option cc\_enable\_arenas = true;

option java\_outer\_classname = "GraphProtos";

option java\_multiple\_files = true;

option java\_package = "org.tensorflow.framework";

option go\_package = "github.com/tensorflow/tensorflow/tensorflow/go/core/framework/graph\_go\_proto";

// Represents the graph of operations

message GraphDef {

repeated NodeDef node = 1;

// Compatibility versions of the graph. See core/public/version.h for version

// history. The GraphDef version is distinct from the TensorFlow version, and

// each release of TensorFlow will support a range of GraphDef versions.

VersionDef versions = 4;

// Deprecated single version field; use versions above instead. Since all

// GraphDef changes before "versions" was introduced were forward

// compatible, this field is entirely ignored.

int32 version = 3 [deprecated = true];

// "library" provides user-defined functions.

//

// Naming:

// \* library.function.name are in a flat namespace.

// NOTE: We may need to change it to be hierarchical to support

// different orgs. E.g.,

// { "/google/nn", { ... }},

// { "/google/vision", { ... }}

// { "/org\_foo/module\_bar", { ... }}

// map<string, FunctionDefLib> named\_lib;

// \* If node[i].op is the name of one function in "library",

// node[i] is deemed as a function call. Otherwise, node[i].op

// must be a primitive operation supported by the runtime.

//

//

// Function call semantics:

//

// \* The callee may start execution as soon as some of its inputs

// are ready. The caller may want to use Tuple() mechanism to

// ensure all inputs are ready in the same time.

//

// \* The consumer of return values may start executing as soon as

// the return values the consumer depends on are ready. The

// consumer may want to use Tuple() mechanism to ensure the

// consumer does not start until all return values of the callee

// function are ready.

FunctionDefLibrary library = 2;

}