Protocol Buffers Development Tools
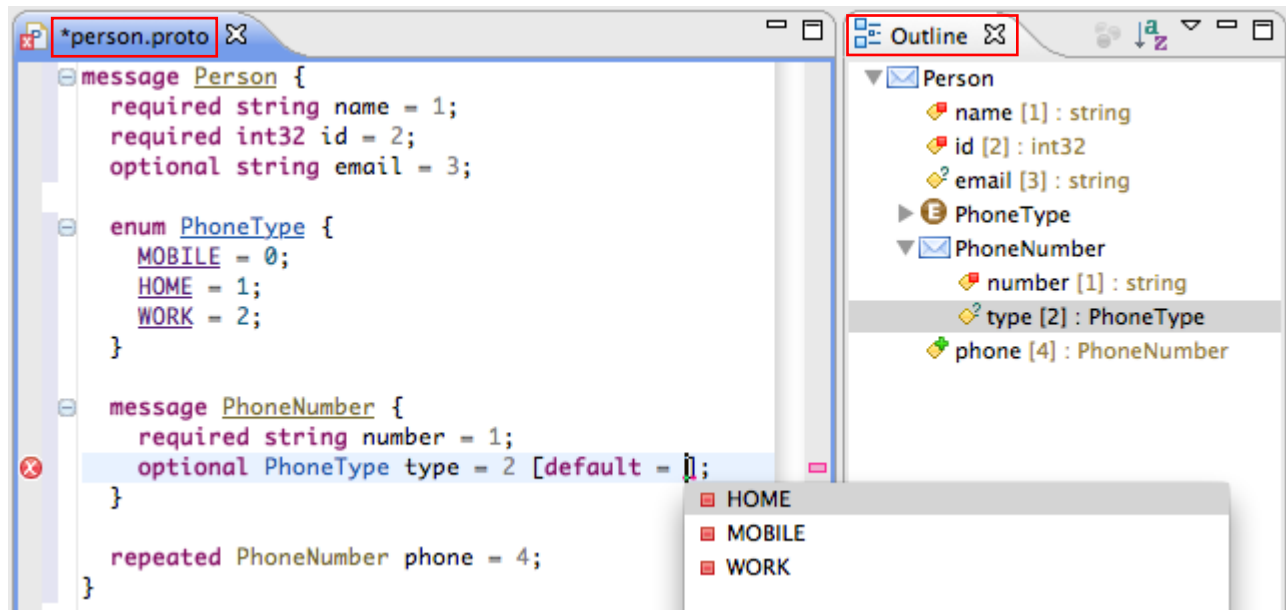
protobuf-dt is an Eclipse plug-in that provides support for Protocol Buffers (protobuf.)

News

- 10/29/2012: protobuf-dt v1.3.3 released. More details can be found here. This version includes bug fixes and performance improvements.

Features

- Syntax highlighting
- Content-assist based on syntax, context and data types
- Automatic generation of numeric tags "as you type"
- 'Outline View' linked to editor
- "Open Declaration" (hyperlinking) support, including imported .proto files
- Content-assist for built-in and custom options
- Javadoc-like documentation
- Configurable integration with protoc
- Automatic removal of trailing whitespace
- Spell checking

See Also

- Releases
- Installing the plug-in
- Configuring import paths
- Getting the source code

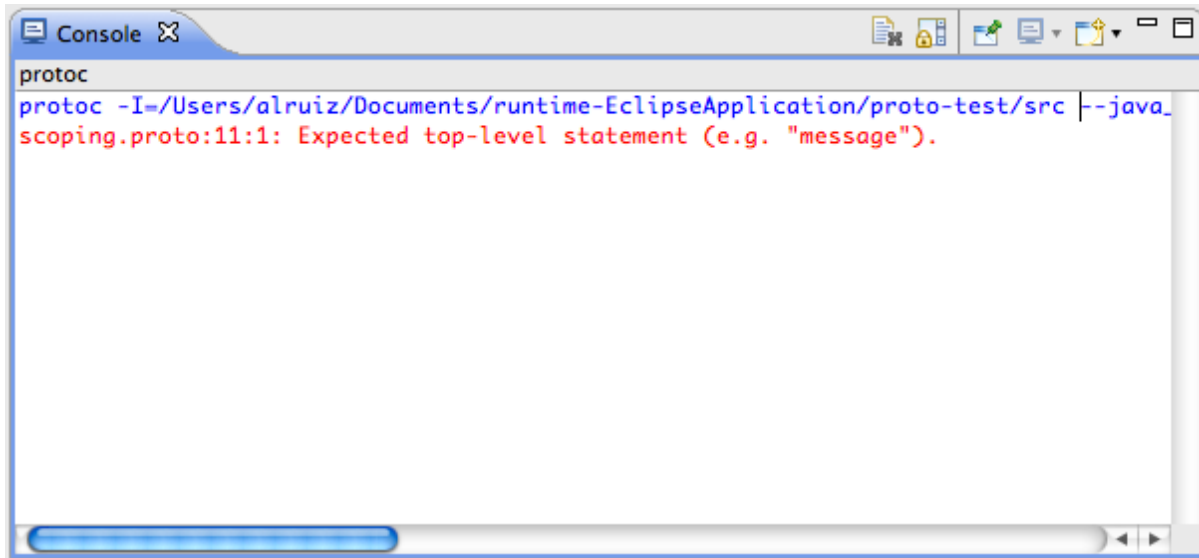This plug-in requires Eclipse 3.7 (Indigo) and Xtext 2.3.0.

IntegrationWithProtoc

protobuf-dt provides integration with protoc, protobuf's compiler, to compile the .proto file being currently edited and generate Java, C++ or Python code from such file. protobuf-dt creates error markers in the editor if protoc finds any errors.

Integration with protoc is **disabled** by default.

New in v1.2.0!

If integration with protoc is enabled, the output of protoc will be shown in Eclipse's console:
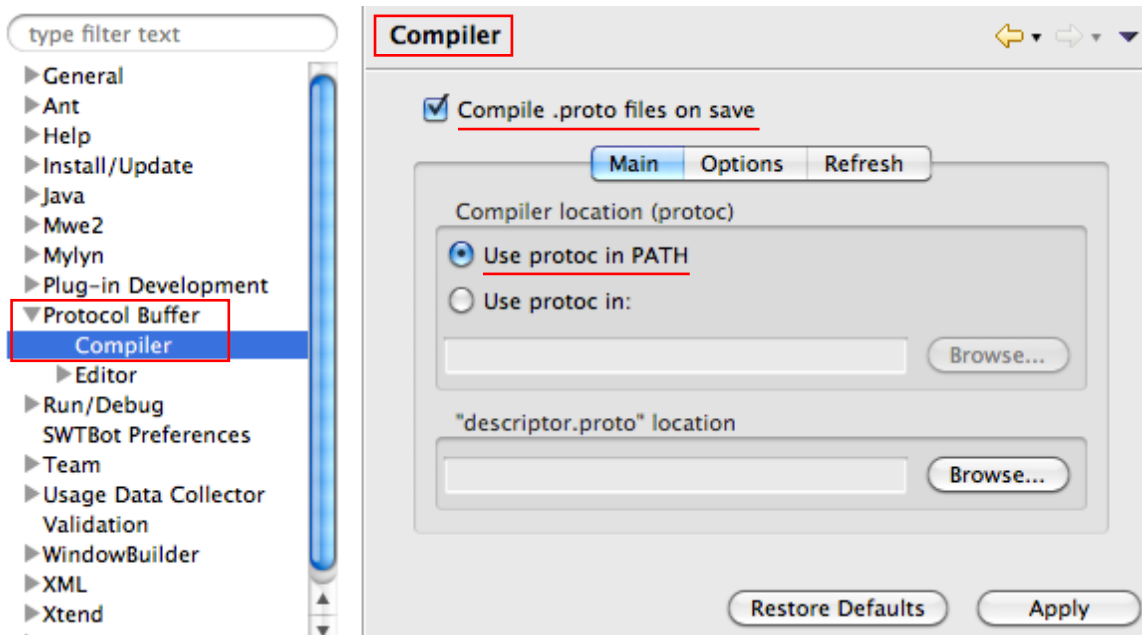

Configuring protoc integration

protoc integration can be configured at the workspace level or project level. Both types of configuration offer exactly the same options.

Before integrating protobuf-dt with protoc, you'll need to download and install the latest protobuf distribution.

Workspace preferences

To configure workspace-level protoc integration, go to the menu "Window" > "Preferences." In the "Preferences" dialog, open the "Protocol Buffer" element on the tree view on the left-hand side and select "Compiler."
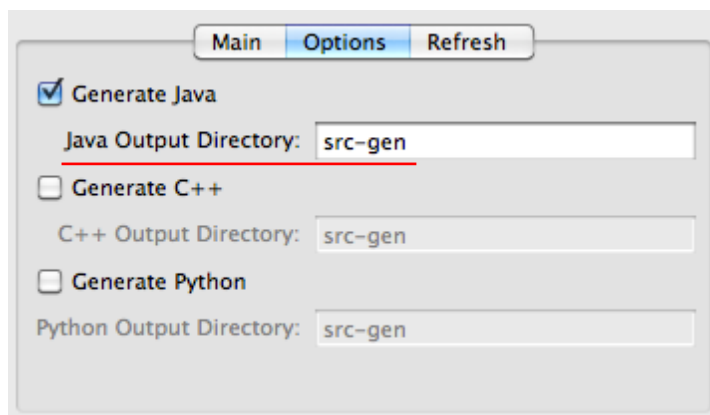
1. Main Tab

In this tab, you can

1. compile a .proto file (with protoc,) every time it is saved
2. specify the path of protoc
3. specify the path of the descriptor.proto file to use when compiling .proto files (optional)
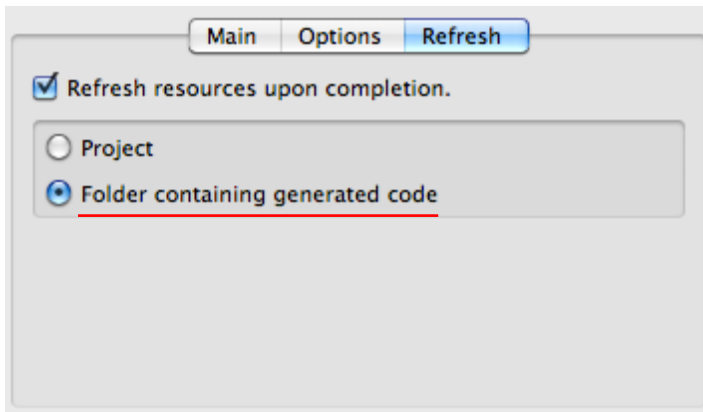
2. Options Tab

In this tab, you can

1. specify the target language for code generation
2. specify the folder where to store the generated code

3. Refresh Tab

In this tab, you can specify whether resources should be refreshed after invoking protoc.

Project preferences

To configure project-specific protoc integration, simply right-click and project and select "Properties" from the pop-up menu. Project-level preferences are exactly the same as workspace-level ones.

Note

By default, the option "Compile .proto files on save" is disabled in both workspace and project preferences.
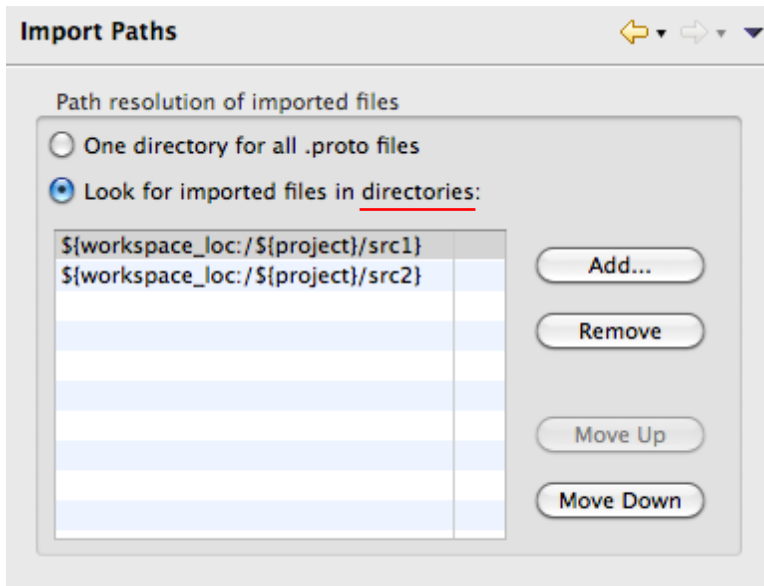
⊡ ImportPaths

If all your .proto files are stored in a single folder, you can stop reading now.

On the other hand, if your .proto files are stored in more than one folder and they import each other across folders, you will need to tell protobuf-dt all the source folders for your .proto files, otherwise type resolution and hyperlinking won't work.

Configuration must be made at the project level. Simply right-click a project and select "Properties" option from the pop-up menu. Once the properties dialog shows up, select the node "Import Paths" under "Protocol Buffer" on the tree view. You should see a page like this one:

Select the option "Look for imported files in directories" and add as many folders as necessary. Then click the OK button.