Maintaining c-ares

Updates to the c-ares dependency involve the following steps:

- 1. Downloading the source archive for the new version.
- 2. Unpacking the source in a temporary workspace directory.
- 3. Removing the test directory (to save disk space).
- 4. Copying over the existing .gitignore, pre-generated config directory and cares.gyp files.
- 5. Replacing the existing deps/cares with the workspace directory.
- 6. Modifying the cares.gyp file for file additions/deletions.
- 7. Rebuilding the main Node.js LICENSE.

Running the update script

The tools/update-cares.sh script automates the update of the c-ares source files, preserving the existing files added by Node.js.

In the following examples, x.y.z should match the c-ares version to update to.

```
./tools/update-cares.sh x.y.z
e.g.
./tools/update-cares.sh 1.18.1
```

Check that Node.js still builds and tests

It may be necessary to update deps/cares/cares.gyp if any significant changes have occurred upstream.

Rebuild the main Node.js license

Run the tools/license-builder.sh script to rebuild the main Node.js LICENSE file. This may result in no changes if c-ares' license has not changed.

```
./tools/license-builder.sh
```

If the updated LICENSE contains changes for other dependencies, those should be done in a separate pull request first.

Commit the changes

```
git add -A deps/cares
```

Add the rebuilt LICENSE if it has been updated.

```
git add LICENSE
```

Commit the changes with a message like

deps: update c-ares to ${\tt x.y.z}$

 ${\tt Updated} \ \ {\tt as} \ \ {\tt described} \ \ {\tt in} \ \ {\tt doc/contributing/maintaining-c-ares.md}.$