

Apache Incubator Project -- Entry Path to the ASF

In the January/February issue, we examined the Apache Software Foundation (ASF), its structure, and projects. In this issue, we continue and extend that discussion to the Apache Incubator Project.

Before starting the Apache Incubator Project, let's first brush up Apache foundation. Apache Group was formed in 1995 to work on the httpd server, which became Apache Software Foundation (ASF) in 1999. As mentioned above, this group started the operations and subsequently created a server called as HTTP Server, which was undoubtedly a marvelous project. This project is still the most popular project of this foundation. Now, this foundation which took its birth from the idea of the HTTP server had matured and emerging as giants. At present, ASF is working on more than 100 projects and sub-projects.

Three years ago, ASF created a Incubator project to encourage new programmers and developers who wish to contribute to the ASF in its success and outsourcing results, and give shape to the new ideas and efforts of these novice programmers and developers.

Headed by a Vice President Jim Jagielski, the initial PMC of Apache Incubator Project worked to streamline the ASF operations and establish a community dedicated to support foundation projects.

Just like other projects, the Apache Incubator Project was not an outcome of one particular idea or of an effort in a single day. It was actually an effort to streamline the ASF operations and at the same time, structured as a rapidly increasing community dedicated to support the Foundation projects. On principle, ASF board agreed on few points and established a Project Management Committee (PMC) for the creation of Apache Incubator Project. The ASF board agreed that the PMC should:

- Encouraged new developers
- Set up a basic structure consisting of guidance, support, education, prototype for documentation and prototype for codebases
- Act as an evaluator and guide as well as a critics for new community efforts.

PMC can create and implement bylaws to achieve Incubator Project objectives.

The Incubator Project has evolved a great deal since its inception. Its now mature enough that new contributors can use it as a blueprint coordinate their efforts. This is possible because Incubator provides the documentation explaining ASF structure and operations as well as how to work within pre-specified framework.

New developers (Individual or Group), who are willing to associate their projects with the Apache Software Foundation, should proceed with/consult with Apache Incubator Project acting as mandatory path.

Now, we will take a brief look into some frequently used terms before moving further into it.

Terminology

These terms are commonly used in the ASF community and other open source projects:

Codebase: Codebase is a bunch of code that collectively forms software. A codebase can serve the purpose of only one project at a time.

Committer: After signing a Contributor Level Agreement (CLA) with the PMC, a developer becomes a committer. After becoming a committer, he can access a code repository of projects and make some decisions related to projects.

Contributor: A contributor is defined as the one who helps ASF consistently introduce project improvements.

CVS: The Concurrent Versioning Systems (CVS) is a code management and version control system used by the ASF. Most of the projects now use Subversion.

Functionality

Incubator Project is a gateway to the ASF for new projects. ASF board has clarified how anyone can participate in the foundation. The process to add a new project has been formulated. So Incubator acts as a deciding factor for a project to work as a sub-project or a Top-Level-Project. This all depends on how this has been projected and what the Apache Incubator's PMC, Sponsor and Mentor say about the project. Let's start how to participate in the functionality of the Apache Incubator Project and then we will go through the process of incubation.

How to participate:

Any developer, any organization or any user can participate in Apache projects. This section will consider steps for individual users as well as projects, steps for projects to be added in ASF will be discussed later under the topic incubation process. Just like any other structured organization, ASF also has a pre-defined path and Incubator Project participants must follow these steps:

- Step 1: Join Incubator Mailing lists

- Step 2: Join project-specific mailing lists
- Step 3: Create your own Website with Apache

It's not mandatory but advisable to go step by step also it isn't mandatory to complete all the steps, which means you can restrict your working at any stage.

In Step 1, join the mailing list of incubator. This is because the selection of member, contributor or committer depends on your efforts, presence and performance in ASF activities.

New members can participate in general and public discussion, access general messages, access digest of general messages, access the messages related to older projects, work with codes available and see announcements related to events or milestones.

A user should subscribe to specific mailing lists to participate in the aforementioned activities. The following are the Mailing lists available in Apache Incubator Projects:

Mailing list	Email address to used to subscribe list
general@incubator.apache.org	general-subscribe@incubator.apache.org
projects@incubator.apache.org	projects-subscribe@incubator.apache.org
cvs@incubator.apache.org	cvs-subscribe@incubator.apache.org
announce@incubator.apache.org	announce-subscribe@incubator.apache.org

The PMC also posses a private mailing list i.e. pmc@incubator.apache.org.

In Step 2, member can join project specific mailing list. Each project posses its own mailing list to facillate coloboration.

So, step 1 is not necessary for someone who just wants to participate in an existing ASF project, whether incubating or not. However, all incubating project committers should be subscribed to the incubator general list.

You can go to step-3 if you want to add your project in ASF. In this step, you must launch your website. Apache also provides a pre-defined directory structure for documentation and project codebase to launch a Website just like ASF, which is highly structured and has a proper path, member lists, maintainers, and a member assimilation process.

Apache structure provides the SVN module on the server to facilitate regular updates, which are essential for a Website. You should review the notes provided for educating users of Website maintenance.

Again, it's not mandatory to pass all steps; the steps you take depend on your requirements. You can stop at step 1 if you only want to participate in general discussions. If you only want to participate in some specific project, you can stop at step 2 Or, you can skip 1 if you are just a user or contributing developer.

Now let us concentrate on how the Incubator Project works to add new projects in the list.

Incubation Process

Step 3 requires that you should create your own website with Apache. This isn't simple as it might sound. It's a multi-faceted process for both the developer and the project. The community expects high-quality products from ASF. The incubation process helps ASF to fulfill these expectation.

The incubation process involves successfully achieving a series of milestones. As the first milestone, you'll choose a champion for your project. The Champion referred here can be the ASF member or officer. Now the question is, how to search the champion? You can choose by working with existing apache projects. This Champion will help you to create you proposal and answer your questions. His service will meet ASF board standards.

Acceptance is the second milestone. It begins with having your sponsor complete a evaluation of the project to check whether project fits well with ASF processes, licensing, and with existing ASF projects or not. The project then faces a vote and is rejected or approved. If approved, the project comes to the PMC. Your sponsor will appoint a mentor for your project; the mentor acts as a guide and watchdog, monitoring your progress, continuity, stability, and suitability throughout the process. He should be appointed before the deciding on rejection or approval of project. The mentor will guide you based on his experience and knowledge of technical and administrative best practices; he will also provide required information on ASF polices and procedures.

Your project crosses a third milestone when it advances from podling to sub-project or top-level project. If your project is found suitable to be a top-level-project, you must submit it to board@apache.org and convince the board that your project warrants top-level project status.

Significance

Why is all this significant? Consider a castle and a jungle. How are they similar and different? Anyone can either enter or join both. The major difference is that in the jungle, anyone can enter from anywhere. There is no set entry point, no rules, no one to check entry, no behavioral responsibilities, and no governing body. Life in the castle is different. There's

a fixed entry point, board of members to check who enters, and behavioral responsibilities for those who enter. There's also a governing body to provide security and ensure stability. Nobody can expect anything from the jungle, but you can expect stability, security, and progress in the castle.

The ASF has evolved to meet the demands of its rapid growth. Through its internal restructuring efforts, the ASF has achieved greater stability and continuity; it has become like a well managed castle. The incubation process ensures those who want to enter and prosper in the castle are aware of and committed to the principles that made ASF successful?especially its nurturing, clearly defined project development process, which embraces collaboration and openness.

The incubator is responsible for:

- Filtering proposals that ultimately can become a new project or sub-project
- Facilitating project creation and providing the required infrastructure
- Supervising and mentoring the incubated community
- Evaluating the maturity of the incubated project and either retiring or promoting it.

The incubator filters projects based primarily on their chances of success. Little concern is given to the level of overlap between similar projects or even to technical issues because many technical approaches can be valid. In this way, the incubator provides significant benefits for both ASF and project developers. For the ASF, it helps ensure a stable and predictable development process. For a project developer, it ensures there's a clear path of project evolution? one designed to recognize and reward the developer commensurate with the level of effort, quality, and value the project reflects.

FAQ

Q: Since the software available at ASF is open source, what happens to my Intellectual Property (IP) rights?

A: The Incubator does nothing to protect a developer's IP rights. It is true that contributors maintain their ownership in the copyright of their contributions. The simply license use to the ASF and its recipients.

Q: I'm not a committer, but I want to update the code. Is that possible?

A: Yes, you can update the code even though you aren't a committer. Read the "how to participate" page.

Q: Can we expect that ASF volunteers to reply to all our direct queries?

A: No, ASF volunteers aren't paid. So, it isn't feasible for them to answer all questions from everyone in the community. However, hundreds of volunteers are available to help you. Be sure to join the mailing lists so you have access to these individuals.