Git vs Mercurial

Mercurial and Git both are two quite similar and most popular distributed version control systems. Their strengths and weaknesses make them ideal for different use cases. Both tools use a directed acyclic graph to store history.

**Mercurial is a distributed source control management tool.** It is free and open-source. It can handle projects of any size and offers an easy and intuitive interface.

Today, Git has more than 31 million users and is owned by Microsoft. Since the last decade, the Git has become the standard for most development projects.

Mercurial still has a handful tool of large development organizations. Some software development giants like Facebook, Mozilla, and World Wide Web Consortium are using it. But it only has approx 2 % of the VCS market share. Comparatively, Git has covered more than 80% market share.

Both version control systems, i.e., Mercurial and Git are distributed version control systems (DVCS).

To better understand the similarities and differences between Git and Mercurial, let's have a look at the following points.

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| **Git** | **Mercurial** |
| Git is a little bit of complex than Mercurial. | Mercurial is simpler than Git. |
| No VCS are entirely secured, but Git offers many functions to enhance safety. | Mercurial may be safer for fresher. It has more security features. |
| Git has a powerful and effective branching model. Branching in Git is better than Branching in Mercurial. | Branching in Mercurial doesn't refer the same meaning as in Git. |
| Git supports the staging area, which is known as the index file. | There is no index or staging area before the commit in Mercurial. |
| The most significant benefit with Git is that it has become an industry-standard, which means more developers are familiar with it. | Mercurial's significant benefit is that it's easy to learn and use, which is useful for less-technical content contributors. |
| Git needs periodic maintenance for repositories. | It does not require any maintenance. |
| It holds Linux heritage. | It is python based. |
| Git is slightly slower than Mercurial. | It is faster than Git. |
| Git supports the unlimited number of parents. | Mercurial allows only two parents. |