| **OS** | **Browser** | **DB** | **Localization** |
| --- | --- | --- | --- |
| Win | Chrome | MSsql | En |
| Mac | Safari | MySQL | RU |
| Lin | Firefox | Oracle | CN |

Observing the table above, the combinations are

3 x 3 x 3 x 3 = 81 possibilities

81 is a high number for test environments, so it is necessary to reduce it to a fit reality. So we can use some tool like pairwise, that is a tool that use an effective test case generation technique to generate few environments that is a good representation of the huge amount of possibilities

Using the <https://sqamate.com/tools/pairwise> site, I could achieve the following combinations:

| Win | Chrome | MSsql | En |
| --- | --- | --- | --- |
| Mac | Safari | MySQL | En |
| Lin | Firefox | Oracle | En |
| Lin | Safari | MSsql | RU |
| Mac | Chrome | Oracle | RU |
| Win | Firefox | MySQL | RU |
| Win | Safari | Oracle | CN |
| Mac | Firefox | MSsql | CN |
| Lin | Chrome | MySQL | CN |

But, as we know, some of these combinations are barely used, like Windows/Linux with Safari as a browser, so it’s a good approach to avoid them. So, creating a new generation excluding this combination:

| Win | Chrome | MSsql | En |
| --- | --- | --- | --- |
| Mac | Safari | MySQL | En |
| Lin | Firefox | Oracle | En |
| Lin | Chrome | MySQL | RU |
| Mac | Firefox | MSsql | RU |
| Win | Firefox | MySQL | CN |
| Win | Chrome | Oracle | RU |
| Mac | Chrome | Oracle | CN |
| Lin | Chrome | MSsql | CN |

To make the tests in these all environments, is a good approach to make a research to select compatible tools with all environments and considering also the team know how. You should research the most effective tools, practical, easy to learn and widely used (more easy to find some help and to train new collaborators) to help you to create and maintain the tests