# Filecoin Phase Two Test (3)-Heterogeneous Cluster Test

Build a Filecoin mining cluster
(https://learnblockchain.cn/tags/%E6%90%AD%E5%BB%BAFilecoin%20%E6%8C%96%E7%9F%BF%E9%9B%86%E7%BE%A4)

> Some people like to spend 3 days to complete the product, and then spend a year to get the customer; but we are more willing to spend 2 years to polish the product, and then spend 10 minutes to impress the customer.

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This article is the last blog post about the second phase of Filecoin testing. Today, I would like to share with you the heterogeneous cluster mining solution that we have recently verified on the testnet.

Let's talk about our cluster architecture first. A total of 9 machines were invested in this test, and the role assignments are as follows:

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Miner(C2 + WinPoSt) x 1 + AMD Worker(P1) x 4 + Intel Worker(P2) x 4
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# 1. Test environment

- Operating system: Ubuntu-18.04LTS
- Test network: Filecoin TestNet Master branch network (non-interopnet network)
- Lotus version: 0.4.0+git.596ed330
- Number of machines: 9
- Storage scheme: Ceph + Raid0 + Raid5

In this test, we invested in a variety of different CPU models, and various system configurations have also been optimized. The specific configuration of the test machine is as follows: