

kubernetes [#68173](#) issue [#68101](#)

在原来的实现中，当

- we have an existing pod on a node:
 - labels: {"b": ""}
 - PodAntiAffinity: term {"b" exists}
- then we got an incoming pod:
 - labels: {"a": ""}
 - PodAntiAffinity: term {"a" exists} and term {"b" exists}
- the incoming pod is scheduled on the node

此时incoming pod可以被分配在该node上，因为PodAntiAffinity不完全匹配existing pod，当且仅当两者的AntiAffinity完全相等时，两者才有互斥关系。

当两者的位置发生改变，即

- we have an existing pod:
 - labels: {"a": ""}
 - PodAntiAffinity: term {"a" exists} and term {"b" exists}
- then we got an incoming pod:
 - labels: {"b": ""}
 - PodAntiAffinity: term {"b" exists}
- the incoming pod is unscheduable

此时incoming pod也应该被分配在该node上，因为AntiAffinity是对称的。问题在于当前的实现中两者并不等价。