

Supplemental Data 3 The blockchain information in the experiments shown in Figure 4

```
]$ ./get_block.sh  
vp0  
{ "height":1,"currentBlockHash":"RrndKwuoJRMjOz/rdD7rJD/NUupiuBuCtQwnZG7Vdi/XXcTd2MDyAMsFAZ1ntZL2/II  
cSUeatIZAKS6ss7fEvg==" }  
vp1  
{ "height":1,"currentBlockHash":"RrndKwuoJRMjOz/rdD7rJD/NUupiuBuCtQwnZG7Vdi/XXcTd2MDyAMsFAZ1ntZL2/II  
cSUeatIZAKS6ss7fEvg==" }  
vp2  
{ "height":1,"currentBlockHash":"RrndKwuoJRMjOz/rdD7rJD/NUupiuBuCtQwnZG7Vdi/XXcTd2MDyAMsFAZ1ntZL2/II  
cSUeatIZAKS6ss7fEvg==" }  
vp3  
{ "height":1,"currentBlockHash":"RrndKwuoJRMjOz/rdD7rJD/NUupiuBuCtQwnZG7Vdi/XXcTd2MDyAMsFAZ1ntZL2/II  
cSUeatIZAKS6ss7fEvg==" }  
[vagrant@ubuntu-1404 fabric]$
```

```
$ ./get_block.sh  
vp0  
{ "height":2,"currentBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdtjzGJPZjgb+3vl7Rldxh  
lg6PsxCEXw4N6tF18jeQ==","previousBlockHash":"RrndKwuoJRMjOz/rdD7rJD/NUupiuBuCtQwnZG7Vdi/XXcTd2MD  
yAMsFAZ1ntZL2/IIcSUeatIZAKS6ss7fEvg==" }  
vp1  
{ "height":2,"currentBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdtjzGJPZjgb+3vl7Rldxh  
lg6PsxCEXw4N6tF18jeQ==","previousBlockHash":"RrndKwuoJRMjOz/rdD7rJD/NUupiuBuCtQwnZG7Vdi/XXcTd2MD  
yAMsFAZ1ntZL2/IIcSUeatIZAKS6ss7fEvg==" }  
vp2  
{ "height":2,"currentBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdtjzGJPZjgb+3vl7Rldxh  
lg6PsxCEXw4N6tF18jeQ==","previousBlockHash":"RrndKwuoJRMjOz/rdD7rJD/NUupiuBuCtQwnZG7Vdi/XXcTd2MD  
yAMsFAZ1ntZL2/IIcSUeatIZAKS6ss7fEvg==" }  
vp3
```

```
{"height":2,"currentBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdtjzgJPZjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ==","previousBlockHash":"RrndKwuojRMjOz/rdD7rJD/NUupiuBuCtQwnZG7Vdi/XXcTd2MDyAMsFAZ1ntZL2/llcSUeatlZAKS6ss7fEvg=="}
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
$. /get_block.sh
```

```
vp0
```

```
{"height":3,"currentBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPpzorUln2KY/Kfu00/rH3oXadWR5Ww3cQ==","previousBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdtjzgJPZjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ=="}
```

```
vp1
```

```
{"height":3,"currentBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPpzorUln2KY/Kfu00/rH3oXadWR5Ww3cQ==","previousBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdtjzgJPZjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ=="}
```

```
vp2
```

```
{"height":3,"currentBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPpzorUln2KY/Kfu00/rH3oXadWR5Ww3cQ==","previousBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdtjzgJPZjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ=="}
```

```
vp3
```

```
{"height":3,"currentBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPpzorUln2KY/Kfu00/rH3oXadWR5Ww3cQ==","previousBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdtjzgJPZjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ=="}
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
----- vp1 stop -----
```

```
$. /get_block.sh
```

```
vp0
```

```
{"height":4,"currentBlockHash":"QEhM2tecsi2KWW8qHoWBiHoyoDIPWei7AU3k7Cn5tRHZxjllIGQ2gwg2+roHPHkecX7dm50aKljiNnKjPjYxgXXQ==","previousBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9IN
```

```
MFoWPPzoruIjn2KY/Kfu0O/rH3oXadWR5Ww3cQ=="}}
```

```
vp1
```

```
curl: (7) Failed to connect to 172.17.0.5 port 5000: No route to host
```

```
vp2
```

```
{"height":4,"currentBlockHash":"QEhM2tecsI2KWW8qHoWBiHoyoDIPWei7AU3k7Cn5tRHZxjllGQ2gwg2+roHPkcecX7dm50aKljiNnKjpYxgXXQ==","previousBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPPzoruIjn2KY/Kfu0O/rH3oXadWR5Ww3cQ=="}}
```

```
vp3
```

```
{"height":4,"currentBlockHash":"QEhM2tecsI2KWW8qHoWBiHoyoDIPWei7AU3k7Cn5tRHZxjllGQ2gwg2+roHPkcecX7dm50aKljiNnKjpYxgXXQ==","previousBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPPzoruIjn2KY/Kfu0O/rH3oXadWR5Ww3cQ=="}}
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
----- vp1 start -----
```

```
$ ./get_block.sh
```

```
vp0
```

```
{"height":5,"currentBlockHash":"4h4q5vpy4hsbOyEljxhQBWM/e23UBrcAJR115LXLrXrW65VVDSmyfa8u+Vlrar+yXifuFGAoJn3KOeOIEqYCuw==","previousBlockHash":"QEhM2tecsI2KWW8qHoWBiHoyoDIPWei7AU3k7Cn5tRHZxjllGQ2gwg2+roHPkcecX7dm50aKljiNnKjpYxgXXQ=="}}
```

```
vp1
```

```
{"height":3,"currentBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPPzoruIjn2KY/Kfu0O/rH3oXadWR5Ww3cQ==","previousBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwj/rVCm6uDtzP3RoGZQdtjzjJPzjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ=="}}
```

```
vp2
```

```
{"height":5,"currentBlockHash":"4h4q5vpy4hsbOyEljxhQBWM/e23UBrcAJR115LXLrXrW65VVDSmyfa8u+Vlrar+yXifuFGAoJn3KOeOIEqYCuw==","previousBlockHash":"QEhM2tecsI2KWW8qHoWBiHoyoDIPWei7AU3k7Cn5tRHZxjllGQ2gwg2+roHPkcecX7dm50aKljiNnKjpYxgXXQ=="}}
```

```
vp3
```

```
{"height":5,"currentBlockHash":"4h4q5vpy4hsbOyEljxhQBWM/e23UBrcAJR115LXLrXrW65VVDSmyfa8u+Vlrar+yXifuFGAoJn3KOeOIEqYCuw==","previousBlockHash":"QEhM2tecsI2KWW8qHoWBiHoyoDIPWei7AU3k7Cn5tRHZxjllGQ2gwg2+roHPkcecX7dm50aKljiNnKjpYxgXXQ=="}}
```

```
GQ2gwg2+roHPkhecX7dm50aKlJlNnKJpYxgXXQ==}
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
$. /get_block.sh
```

```
vp0
```

```
{"height":6,"currentBlockHash":"hu3mkGjf/RDQrZ5ta8FFfnx0dWoFGARek4/2TNBAPv891utbbQktOL4TKgpTGMhA  
Lf7Exdl2nFFa5Vj5Fvh8lw==","previousBlockHash":"4h4q5vpy4hsbOyEljxhQBWM/e23UBrcAJR115LXLrXrW65VVD  
Smyfa8u+Vlrar+yXifuFGAoJn3KOeOIEqYCuw=="}  
}
```

```
vp1
```

```
{"height":3,"currentBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPpzorUlJn2KY/K  
fu00/rH3oXadWR5Ww3cQ==","previousBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdt  
jzjJPZjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ=="}  
}
```

```
vp2
```

```
{"height":6,"currentBlockHash":"hu3mkGjf/RDQrZ5ta8FFfnx0dWoFGARek4/2TNBAPv891utbbQktOL4TKgpTGMhA  
Lf7Exdl2nFFa5Vj5Fvh8lw==","previousBlockHash":"4h4q5vpy4hsbOyEljxhQBWM/e23UBrcAJR115LXLrXrW65VVD  
Smyfa8u+Vlrar+yXifuFGAoJn3KOeOIEqYCuw=="}  
}
```

```
vp3
```

```
{"height":6,"currentBlockHash":"hu3mkGjf/RDQrZ5ta8FFfnx0dWoFGARek4/2TNBAPv891utbbQktOL4TKgpTGMhA  
Lf7Exdl2nFFa5Vj5Fvh8lw==","previousBlockHash":"4h4q5vpy4hsbOyEljxhQBWM/e23UBrcAJR115LXLrXrW65VVD  
Smyfa8u+Vlrar+yXifuFGAoJn3KOeOIEqYCuw=="}  
}
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
$. /get_block.sh
```

```
vp0
```

```
{"height":7,"currentBlockHash":"R0896ePWRW6fBbf0IX0nx8c4wc6zhIJE27JLEuk5H7bUg3VBpn/gcgAu8nqFY6Wye  
lkzaamqwZiophJtmGeBeA==","previousBlockHash":"hu3mkGjf/RDQrZ5ta8FFfnx0dWoFGARek4/2TNBAPv891utbb  
QktOL4TKgpTGMhALf7Exdl2nFFa5Vj5Fvh8lw=="}  
}
```

```
vp1
```

```
{"height":3,"currentBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPpzorUlJn2KY/K  
fu00/rH3oXadWR5Ww3cQ==","previousBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwJ/rVCm6uDtzP3RoGZQdt  
jzjJPZjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ=="}  
}
```

vp2

```
{"height":7,"currentBlockHash":"R0896ePWRW6fBbf0IX0nx8c4wc6zhIJE27JLEuk5H7bUg3VBpn/gcgAu8nqFY6Wye  
lkzaamqwZiophJtmGeBeA==","previousBlockHash":"hu3mkGjf/RDQrZ5ta8FFfnx0dWoFGARek4/2TNBAPv891utbb  
QktOL4TKgpTGMhAlf7Exdl2nFFa5Vj5Fvh8lw=="} }
```

vp3

```
{"height":7,"currentBlockHash":"R0896ePWRW6fBbf0IX0nx8c4wc6zhIJE27JLEuk5H7bUg3VBpn/gcgAu8nqFY6Wye  
lkzaamqwZiophJtmGeBeA==","previousBlockHash":"hu3mkGjf/RDQrZ5ta8FFfnx0dWoFGARek4/2TNBAPv891utbb  
QktOL4TKgpTGMhAlf7Exdl2nFFa5Vj5Fvh8lw=="} }
```

[vagrant@ubuntu-1404 fabric]\$

\$./get_block.sh

vp0

```
{"height":8,"currentBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vclLNEfgi04ygchKDbb3VBE7jqCmz0v  
OOHsOYZvgbLrQPqY+bvg==","previousBlockHash":"R0896ePWRW6fBbf0IX0nx8c4wc6zhIJE27JLEuk5H7bUg3V  
Bpn/gcgAu8nqFY6WyeLkzaamqwZiophJtmGeBeA=="} }
```

vp1

```
{"height":3,"currentBlockHash":"A/7w4Rg2UsgL1req66R74+fj2+o6iu9p8Tg9IN5qZFATm9INMFoWPpzorUjN2KY/K  
fu00/rH3oXadWR5Ww3cQ==","previousBlockHash":"YOZO7fZhVfUu+XPlyVxOWSZKePwj/rVCm6uDtzP3RoGZQdt  
jzjJPZjgb+3vI7Rldxhlg6PsxCEXw4N6tF18jeQ=="} }
```

vp2

```
{"height":8,"currentBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vclLNEfgi04ygchKDbb3VBE7jqCmz0v  
OOHsOYZvgbLrQPqY+bvg==","previousBlockHash":"R0896ePWRW6fBbf0IX0nx8c4wc6zhIJE27JLEuk5H7bUg3V  
Bpn/gcgAu8nqFY6WyeLkzaamqwZiophJtmGeBeA=="} }
```

vp3

```
{"height":8,"currentBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vclLNEfgi04ygchKDbb3VBE7jqCmz0v  
OOHsOYZvgbLrQPqY+bvg==","previousBlockHash":"R0896ePWRW6fBbf0IX0nx8c4wc6zhIJE27JLEuk5H7bUg3V  
Bpn/gcgAu8nqFY6WyeLkzaamqwZiophJtmGeBeA=="} }
```

[vagrant@ubuntu-1404 fabric]\$

\$./get_block.sh

vp0

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7CJ+A==","previousBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPyQ+bvg=="}
```

vp1

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7CJ+A==","previousBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPyQ+bvg=="}
```

vp2

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7CJ+A==","previousBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPyQ+bvg=="}
```

vp3

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7CJ+A==","previousBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPyQ+bvg=="}
```

[vagrant@ubuntu-1404 fabric]\$

\$./get_block.sh

vp0

```
{"height":10,"currentBlockHash":"DXJ8xMW6HAZ2tMfkUgyNZaQGo/Cuufy4axnQPBI3Kk+phTmb4zZsrDvCcMkQiElbYFrn2Pyoc5las/D9PC0bQ==","previousBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7CJ+A=="}
```

vp1

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7CJ+A==","previousBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPyQ+bvg=="}
```

vp2

```
{"height":10,"currentBlockHash":"DXJ8xMW6HAZ2tMfkUgyNZaQGo/Cuufy4axnQPBI3Kk+phTmb4zZsrDvCcMkQiElbYFrn2Pyoc5las/D9PC0bQ==","previousBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7CJ+A=="}
```

vp3

```
{"height":10,"currentBlockHash":"DXJ8xMW6HAZ2tMfkUgyNZAqGo/Cuufy4axnQPbID3Kk+phTmb4zZsrDvCcMkQiElbYFrn2Pyoc5las/D9PC0bQ==","previousBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYLU4GyG0QmESyBXHQI0gv7Cj+A=="}  
[vagrant@ubuntu-1404 fabric]$
```

```
]$ ./get_block.sh
```

vp0

```
{"height":11,"currentBlockHash":"VA3JVfVwKWCP7+jUfDvcAG5p9I/bRdTqPPwCpPwf/wtTOg+yIwM+2AwRCRPQAw0MBBRvazBDbGiiABSsAsu28A==","previousBlockHash":"DXJ8xMW6HAZ2tMfkUgyNZAqGo/Cuufy4axnQPbID3Kk+phTmb4zZsrDvCcMkQiElbYFrn2Pyoc5las/D9PC0bQ=="}  
[vagrant@ubuntu-1404 fabric]$
```

vp1

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYLU4GyG0QmESyBXHQI0gv7Cj+A==","previousBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhIF+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPpyQ+bvg=="}  
[vagrant@ubuntu-1404 fabric]$
```

vp2

```
{"height":11,"currentBlockHash":"VA3JVfVwKWCP7+jUfDvcAG5p9I/bRdTqPPwCpPwf/wtTOg+yIwM+2AwRCRPQAw0MBBRvazBDbGiiABSsAsu28A==","previousBlockHash":"DXJ8xMW6HAZ2tMfkUgyNZAqGo/Cuufy4axnQPbID3Kk+phTmb4zZsrDvCcMkQiElbYFrn2Pyoc5las/D9PC0bQ=="}  
[vagrant@ubuntu-1404 fabric]$
```

vp3

```
{"height":11,"currentBlockHash":"VA3JVfVwKWCP7+jUfDvcAG5p9I/bRdTqPPwCpPwf/wtTOg+yIwM+2AwRCRPQAw0MBBRvazBDbGiiABSsAsu28A==","previousBlockHash":"DXJ8xMW6HAZ2tMfkUgyNZAqGo/Cuufy4axnQPbID3Kk+phTmb4zZsrDvCcMkQiElbYFrn2Pyoc5las/D9PC0bQ=="}  
[vagrant@ubuntu-1404 fabric]$
```

```
$ ./get_block.sh
```

vp0

```
{"height":12,"currentBlockHash":"ggMOHYpbcz4aQCE9xXRwxSlpcdu/Xv29/EDbSmz2iiX5j5jDqnJ0Und4GP+U+KZeQscO/LvkkM3sp1MhtjQvmQ==","previousBlockHash":"VA3JVfVwKWCP7+jUfDvcAG5p9I/bRdTqPPwCpPwf/wtTOg+yIwM+2AwRCRPQAw0MBBRvazBDbGiiABSsAsu28A=="}  
[vagrant@ubuntu-1404 fabric]$
```

vp1

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7Cj+A==","previousBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPyQ+bvg=="}
```

vp2

```
{"height":12,"currentBlockHash":"ggMOHYpbcz4aQCE9xXRwxSlpcdu/Xv29/EDbSmz2iiX5j5jDqnJ0Und4GP+U+KZeQscO/LvkkM3sp1MhtjQvmQ==","previousBlockHash":"VA3JvfWkWCP7+jUfDvcAG5p9I/bRdTqPPwcPPwf/wtTOg+yIwM+2AwRCPQAw0MBBRvazBDbGiiABSsAsu28A=="}
```

vp3

```
{"height":12,"currentBlockHash":"ggMOHYpbcz4aQCE9xXRwxSlpcdu/Xv29/EDbSmz2iiX5j5jDqnJ0Und4GP+U+KZeQscO/LvkkM3sp1MhtjQvmQ==","previousBlockHash":"VA3JvfWkWCP7+jUfDvcAG5p9I/bRdTqPPwcPPwf/wtTOg+yIwM+2AwRCPQAw0MBBRvazBDbGiiABSsAsu28A=="}
```

[vagrant@ubuntu-1404 fabric]\$

\$. /get_block.sh

vp0

```
{"height":13,"currentBlockHash":"QYZQy0ZC75y1EBAUdnigik3ywaxY4j4o/IM+dDhRcCSAarYkellA9XTZ7dpL4o6mICcjpZT5uPCXIX18j+bfTA==","previousBlockHash":"ggMOHYpbcz4aQCE9xXRwxSlpcdu/Xv29/EDbSmz2iiX5j5jDqnJ0Und4GP+U+KZeQscO/LvkkM3sp1MhtjQvmQ=="}
```

vp1

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYYLU4GyG0QmESyBXHQI0gv7Cj+A==","previousBlockHash":"CYdhLTgDvjz7gBB8ZaCenXEdRwRPBhhIF+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPyQ+bvg=="}
```

vp2

```
{"height":13,"currentBlockHash":"QYZQy0ZC75y1EBAUdnigik3ywaxY4j4o/IM+dDhRcCSAarYkellA9XTZ7dpL4o6mICcjpZT5uPCXIX18j+bfTA==","previousBlockHash":"ggMOHYpbcz4aQCE9xXRwxSlpcdu/Xv29/EDbSmz2iiX5j5jDqnJ0Und4GP+U+KZeQscO/LvkkM3sp1MhtjQvmQ=="}
```

vp3

```
{"height":13,"currentBlockHash":"QYZQy0ZC75y1EBAUdnigik3ywaxY4j4o/IM+dDhRcCSAarYkellA9XTZ7dpL4o6mICcjpZT5uPCXIX18j+bfTA==","previousBlockHash":"ggMOHYpbcz4aQCE9xXRwxSlpcdu/Xv29/EDbSmz2iiX5j5jDqnJ0Und4GP+U+KZeQscO/LvkkM3sp1MhtjQvmQ=="}
```



```
[vagrant@ubuntu-1404 fabric]$
```

```
$ ./get_block.sh
```

```
vp0
```

```
{"height":14,"currentBlockHash":"jQak3rVCzj8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBxOqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug==","previousBlockHash":"QYZQy0ZC75y1EBAUdnigik3ywaxY4j4o/IM+dDhRcCSAarYkellA9XTZ7dpL4o6mlCcjpZT5uPCXIX18j+bfTA=="}
```

```
vp1
```

```
{"height":9,"currentBlockHash":"X3LxiedC66I9bRFgekBL2pikCNKjlueGeSddOTwxcibDAGTNwlarR3k33fLYLU4GyG0QmESyBXHQI0gv7Cj+A==","previousBlockHash":"CYdhLTgDvJz7gBB8ZaCenXEdRwRPBhhf+vcILNEfgi04ygchKDbb3VBE7jqCmz0vOOHsOYZvgbLrQPpyQ+bvg=="}
```

```
vp2
```

```
{"height":14,"currentBlockHash":"jQak3rVCzj8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBxOqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug==","previousBlockHash":"QYZQy0ZC75y1EBAUdnigik3ywaxY4j4o/IM+dDhRcCSAarYkellA9XTZ7dpL4o6mlCcjpZT5uPCXIX18j+bfTA=="}
```

```
vp3
```

```
{"height":14,"currentBlockHash":"jQak3rVCzj8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBxOqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug==","previousBlockHash":"QYZQy0ZC75y1EBAUdnigik3ywaxY4j4o/IM+dDhRcCSAarYkellA9XTZ7dpL4o6mlCcjpZT5uPCXIX18j+bfTA=="}
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
$ ./get_block.sh
```

```
vp0
```

```
{"height":15,"currentBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA==","previousBlockHash":"jQak3rVCzj8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBxOqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug=="}
```

```
vp1
```

```
{"height":15,"currentBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA==","previousBlockHash":"jQak3rVCzj8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBxOqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug=="}
```

```
Oqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug=="}
```

```
vp2
```

```
{"height":15,"currentBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA==","previousBlockHash":"jQak3rVCzJ8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBxOqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug=="}
```

```
vp3
```

```
{"height":15,"currentBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA==","previousBlockHash":"jQak3rVCzJ8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBxOqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug=="}
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
$. /get_block.sh
```

```
vp0
```

```
{"height":16,"currentBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43/kUF324Z+n6KZ1uYEBug/w==","previousBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA=="}
```

```
vp1
```

```
{"height":15,"currentBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA==","previousBlockHash":"jQak3rVCzJ8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBxOqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug=="}
```

```
vp2
```

```
{"height":16,"currentBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43/kUF324Z+n6KZ1uYEBug/w==","previousBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA=="}
```

```
vp3
```

```
{"height":16,"currentBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43/kUF324Z+n6KZ1uYEBug/w==","previousBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA=="}
```

```
[vagrant@ubuntu-1404 fabric]$
```

-----vp2 stop -----

```
$ ./get_block.
```

```
sh
```

```
vp0
```

```
{"height":16,"currentBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43/  
/kUF324Z+n6KZ1uYEBug/w==","previousBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAA  
AK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA=="}
```

```
vp1
```

```
{"height":15,"currentBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g  
3HDKuvQjc+3rvAsilivVA==","previousBlockHash":"jQak3rVCzj8Bo/oeiieUCv6EpRs+prvYiWxNBZEwSfGPPmqNzBx  
Oqal7+EFHz1/kyPVIQTmUTmafs2L30ZdGug=="}
```

```
vp2
```

```
curl: (7) Failed to connect to 172.17.0.6 port 5000: No route to host
```

```
vp3
```

```
{"height":16,"currentBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43/  
/kUF324Z+n6KZ1uYEBug/w==","previousBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAA  
AK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA=="}
```

```
[vagrant@ubuntu-1404 fabric]$
```

-----vp2 start -----

```
====before invoke
```

```
$ ./get_block.sh
```

```
vp0
```

```
{"height":17,"currentBlockHash":"hWbu6QQEXU2Wcd8ZS3wIzIAAFxHLh788Tt7+HbVuplkbRsOL9y2VT0t0EyOB  
mEKone6rIMUXqXK4eCqoXN9+fg==","previousBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDo  
ERU1yxPt7NASCB493jr43//kUF324Z+n6KZ1uYEBug/w=="}
```

```
vp1
```

```
{"height":17,"currentBlockHash":"hWbu6QQEXU2Wcd8ZS3wIzIAAFxHLh788Tt7+HbVuplkbRsOL9y2VT0t0EyOB
```

```
mEKone6rIMUXqXK4eCqoXN9+fg==","previousBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43//kUF324Z+n6KZ1uYEBug/w=="}
ERU1yxPt7NASCB493jr43//kUF324Z+n6KZ1uYEBug/w=="}

```

vp2

```
{"height":16,"currentBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43/
/kUF324Z+n6KZ1uYEBug/w==","previousBlockHash":"A24fymYzY2fQwwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAA
AK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA=="}

```

vp3

```
{"height":17,"currentBlockHash":"hWbu6QQEXU2Wcd8ZS3wlZiAAFxHLh788Tt7+HbVuplkbRsOL9y2VT0t0EyOB
mEKone6rIMUXqXK4eCqoXN9+fg==","previousBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDo
ERU1yxPt7NASCB493jr43//kUF324Z+n6KZ1uYEBug/w=="}

```

[vagrant@ubuntu-1404 fabric]\$

====after invoke

\$. /get_block.sh

vp0

```
{"height":18,"currentBlockHash":"z3WWJHYte5Y7es1PNj4ro6ixo2WVd+5ZhJDWAg/uinECR3EYiH1saRgYoeUz0yq
glaiGAd0UdQCFRAB80Ujtg==","previousBlockHash":"hWbu6QQEXU2Wcd8ZS3wlZiAAFxHLh788Tt7+HbVuplkbRs
OL9y2VT0t0EyOBmEKone6rIMUXqXK4eCqoXN9+fg=="}

```

vp1

```
{"height":18,"currentBlockHash":"z3WWJHYte5Y7es1PNj4ro6ixo2WVd+5ZhJDWAg/uinECR3EYiH1saRgYoeUz0yq
glaiGAd0UdQCFRAB80Ujtg==","previousBlockHash":"hWbu6QQEXU2Wcd8ZS3wlZiAAFxHLh788Tt7+HbVuplkbRs
OL9y2VT0t0EyOBmEKone6rIMUXqXK4eCqoXN9+fg=="}

```

vp2

```
{"height":16,"currentBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43/
/kUF324Z+n6KZ1uYEBug/w==","previousBlockHash":"A24fymYzY2fQwwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAA
AK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA=="}

```

vp3

```
{"height":18,"currentBlockHash":"z3WWJHYte5Y7es1PNj4ro6ixo2WVd+5ZhJDWAg/uinECR3EYiH1saRgYoeUz0yq
glaiGAd0UdQCFRAB80Ujtg==","previousBlockHash":"hWbu6QQEXU2Wcd8ZS3wlZiAAFxHLh788Tt7+HbVuplkbRs
OL9y2VT0t0EyOBmEKone6rIMUXqXK4eCqoXN9+fg=="}

```

[vagrant@ubuntu-1404 fabric]\$

```
$ ./get_block.sh
```

```
vp0
```

```
{"height":19,"currentBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQMWM8L7IMsDuXzepVa+r6jSk8JZdkmC1PbMYGoqnw==","previousBlockHash":"z3WWJHYte5Y7es1PNj4ro6ixo2WVd+5ZhJDWAg/uinECR3EYiH1saRgYoeUz0yqglaiGAd0UdQCFRAB80ujtg=="}
```

```
vp1
```

```
{"height":19,"currentBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQMWM8L7IMsDuXzepVa+r6jSk8JZdkmC1PbMYGoqnw==","previousBlockHash":"z3WWJHYte5Y7es1PNj4ro6ixo2WVd+5ZhJDWAg/uinECR3EYiH1saRgYoeUz0yqglaiGAd0UdQCFRAB80ujtg=="}
```

```
vp2
```

```
{"height":16,"currentBlockHash":"jBU+ct82OfnQCAY1sOav8kZ3B40X2ZDvBks1J37pDoERU1yxPt7NASCB493jr43/kUF324Z+n6KZ1uYEBug/w==","previousBlockHash":"A24fymYzY2fQwwuY/z73dY/pCi90OpaUIDiWz4M4Z9qoiAAAK/bxle5qQY7IKFI1g3HDKuvQjc+3rvAsilivVA=="}
```

```
vp3
```

```
{"height":19,"currentBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQMWM8L7IMsDuXzepVa+r6jSk8JZdkmC1PbMYGoqnw==","previousBlockHash":"z3WWJHYte5Y7es1PNj4ro6ixo2WVd+5ZhJDWAg/uinECR3EYiH1saRgYoeUz0yqglaiGAd0UdQCFRAB80ujtg=="}
```

```
[vagrant@ubuntu-1404 fabric]$
```

```
$ ./get_block.sh
```

```
vp0
```

```
{"height":20,"currentBlockHash":"Rdat/CfO/11ULfcjpX+tOTIB76+6YsZwmijdfk7CT8qwF9DMNye25Cz0xAUpDrueKYM1EyLdS9H+zNR4fWXf/g==","previousBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQMWM8L7IMsDuXzepVa+r6jSk8JZdkmC1PbMYGoqnw=="}
```

```
vp1
```

```
{"height":20,"currentBlockHash":"Rdat/CfO/11ULfcjpX+tOTIB76+6YsZwmijdfk7CT8qwF9DMNye25Cz0xAUpDrueKYM1EyLdS9H+zNR4fWXf/g==","previousBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQMWM8L7IMsDuXzepVa+r6jSk8JZdkmC1PbMYGoqnw=="}
```

```
vp2
```

```
{"height":20,"currentBlockHash":"Rdat/CfO/11ULfcjpX+tOTIB76+6YsZwmijdfk7CT8qwf9DMNye25Cz0xAUpDrue  
KYM1EyLdS9H+zNR4fWXf/g==","previousBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQ  
MWM8L7IMsDuXzepVa+r6jSk8JZdkmC1PbMYGoqnw=="}
```

vp3

```
{"height":20,"currentBlockHash":"Rdat/CfO/11ULfcjpX+tOTIB76+6YsZwmijdfk7CT8qwf9DMNye25Cz0xAUpDrue  
KYM1EyLdS9H+zNR4fWXf/g==","previousBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQ  
MWM8L7IMsDuXzepVa+r6jSk8JZdkmC1PbMYGoqnw=="}
```

[vagrant@ubuntu-1404 fabric]\$

```
$. /get_block.sh
```

vp0

```
{"height":21,"currentBlockHash":"ejiaUWYteAiQ2O+XI+KagcbAX4/Mjtb1Kr/eRelpZQsMF2nsv6N+qBdR+hkqlyRIS  
6ldyTRX/WifQFsxHozeTg==","previousBlockHash":"Rdat/CfO/11ULfcjpX+tOTIB76+6YsZwmijdfk7CT8qwf9DMNy  
e25Cz0xAUpDrueKYM1EyLdS9H+zNR4fWXf/g=="}
```

vp1

```
{"height":21,"currentBlockHash":"ejiaUWYteAiQ2O+XI+KagcbAX4/Mjtb1Kr/eRelpZQsMF2nsv6N+qBdR+hkqlyRIS  
6ldyTRX/WifQFsxHozeTg==","previousBlockHash":"Rdat/CfO/11ULfcjpX+tOTIB76+6YsZwmijdfk7CT8qwf9DMNy  
e25Cz0xAUpDrueKYM1EyLdS9H+zNR4fWXf/g=="}
```

vp2

```
{"height":20,"currentBlockHash":"Rdat/CfO/11ULfcjpX+tOTIB76+6YsZwmijdfk7CT8qwf9DMNye25Cz0xAUpDrue  
KYM1EyLdS9H+zNR4fWXf/g==","previousBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQ  
MWM8L7IMsDuXzepVa+r6jSk8JZdkmC1PbMYGoqnw=="}
```

vp3

```
{"height":21,"currentBlockHash":"ejiaUWYteAiQ2O+XI+KagcbAX4/Mjtb1Kr/eRelpZQsMF2nsv6N+qBdR+hkqlyRIS  
6ldyTRX/WifQFsxHozeTg==","previousBlockHash":"Rdat/CfO/11ULfcjpX+tOTIB76+6YsZwmijdfk7CT8qwf9DMNy  
e25Cz0xAUpDrueKYM1EyLdS9H+zNR4fWXf/g=="}
```

[vagrant@ubuntu-1404 fabric]\$

```
$. /get_block.sh
```

vp0

```
{"height":22,"currentBlockHash":"g8ccLkI0dJH27kZ3O5Ldh9/6c84KNZU0jetpzN1tLlxG9aWTyECZM9NQ02ogar5Zk3si/Zdl7rYI+EFhufhXKw==","previousBlockHash":"ejiaUWYteAiQ2O+XI+KagcbAX4/Mjtb1Kr/eRelpZQsMF2nsv6N+qBdR+hkqIYRIS6ldyTRX/WifQFsxHozeTg=="}
```

vp1

```
{"height":22,"currentBlockHash":"g8ccLkI0dJH27kZ3O5Ldh9/6c84KNZU0jetpzN1tLlxG9aWTyECZM9NQ02ogar5Zk3si/Zdl7rYI+EFhufhXKw==","previousBlockHash":"ejiaUWYteAiQ2O+XI+KagcbAX4/Mjtb1Kr/eRelpZQsMF2nsv6N+qBdR+hkqIYRIS6ldyTRX/WifQFsxHozeTg=="}
```

vp2

```
{"height":20,"currentBlockHash":"Rdat/CfO/11ULfcjpx+tOTIB76+6YsZwmijdfk7CT8qwF9DMNye25Cz0xAUpDrueKYM1EyLdS9H+zNR4fWXf/g==","previousBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQMWM8L7IMsDuXzepVa+r6jSk8JzdkmC1PbMYGoqnw=="}
```

vp3

```
{"height":22,"currentBlockHash":"g8ccLkI0dJH27kZ3O5Ldh9/6c84KNZU0jetpzN1tLlxG9aWTyECZM9NQ02ogar5Zk3si/Zdl7rYI+EFhufhXKw==","previousBlockHash":"ejiaUWYteAiQ2O+XI+KagcbAX4/Mjtb1Kr/eRelpZQsMF2nsv6N+qBdR+hkqIYRIS6ldyTRX/WifQFsxHozeTg=="}
```

[vagrant@ubuntu-1404 fabric]\$

[vagrant@ubuntu-1404 fabric]\$

\$. /get_block.sh

vp0

```
{"height":24,"currentBlockHash":"Dcy3znnXDx3C79j+JYtY0K5peVSIXWs/3rCiCo49hmXOboqZPXFrLCKCCAzW6t83zwmFFGxyJDL3TUYh8z3Kxg==","previousBlockHash":"G2TYiTdz+vu9Pr1ZEtlBMyEW8T4aGyM4sw/ZGrfLwtA/V7uRh/+mWeoyvNQxx80dQJ3Jy4UIbnHFOBND/4Skg=="}
```

vp1

```
{"height":24,"currentBlockHash":"Dcy3znnXDx3C79j+JYtY0K5peVSIXWs/3rCiCo49hmXOboqZPXFrLCKCCAzW6t83zwmFFGxyJDL3TUYh8z3Kxg==","previousBlockHash":"G2TYiTdz+vu9Pr1ZEtlBMyEW8T4aGyM4sw/ZGrfLwtA/V7uRh/+mWeoyvNQxx80dQJ3Jy4UIbnHFOBND/4Skg=="}
```

vp2

```
{"height":20,"currentBlockHash":"Rdat/CfO/11ULfcjpx+tOTIB76+6YsZwmijdfk7CT8qwF9DMNye25Cz0xAUpDrueKYM1EyLdS9H+zNR4fWXf/g==","previousBlockHash":"mTjtFgrWkxRvvoBKNrVG7Mz1C3Kt4VRJHQ4SZLsN/3tcQMWM8L7IMsDuXzepVa+r6jSk8JzdkmC1PbMYGoqnw=="}
```

vp3

```
{"height":24,"currentBlockHash":"Dcy3znnXDx3C79j+JYtY0K5peVSIXWs/3rCiCo49hmXOboqZPXFrLCKCCAzW6t8  
3zwmFFGxyJDL3TUYh8z3Kxg==","previousBlockHash":"G2TYíTDZ+vu9Pr1ZEtIBMyEW8T4aGyM4sw/ZGrfLwtA/V7  
uRh/+mWeoyvNQxx80dQJ3Jy4UIbnHFOBND/45kg=="}
```

[vagrant@ubuntu-1404 fabric]\$