Link to tech journal: <https://github.com/seraphimgerber/NET-150>

PPC uses the private class B space of 172.16.0.0/16. Currently all hosts are on the same network which is causing hate and discontent due to network performance impacts (hence, the sacking of Henry). Here is some information which may help you in designing your subnet scheme.

## Mumbai Divisions

* Manufacturing will need 612 hosts
* Engineering will need 31 hosts

## North American Divisions

* Sales is the largest division with a host requirement of 1200
* HR needs 10 hosts
* Accounting will need space for 24 hosts **(note gateways are part of this number too)**

Subnet mask is 255.255.0.0

| Name | # Hosts | CIDR | Increment | Network Address | First Usable Host Address | Last Usable Host Address | Broadcast Address |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Mumbai Manufacturing | 612 | /22 | 1024 | 172.16.8.0 /22 | 172.16.8.1 | 172.16.11.254 | 172.16.11.255 |
| Mumbai Engineering | 31 | /26 | 64 | 172.16.12.0 /26 | 172.16.12.1 | 172.16.12.62 | 172.16.12.63 |
| NA Sales | 1200 | /21 | 2048 | 172.16.0.0 /21 | 172.16.0.1 | 172.16.7.254 | 172.16.7.255 |
| NA HR | 10 | /28 | 16 | 172.16.12.96 /28 | 172.16.12.97 | 172.16.12.110 | 172.16.12.111 |
| NA Accounting | 24 | /27 | 32 | 172.16.12.64 /27 | 172.16.12.65 | 172.16.12.94 | 172.16.12.95 |
|  |  |  |  |  |  |  |  |