



Let's go to the colonies!

Or, just update your dang OS on time.

caskey@{gmail,twitter,github}

Any day now...

1950's - Werner von Braun proposal

1950-70's - USA

- Project Orion
- Project EMPIRE
- NERVA power

Russia - MPK Mars Piloted Complex

1980's (the MTV era)

Uni. Colorado at Boulder "The Case for Mars"

Mars Direct

Footsteps to Mars

Great Exploration Project

France: "A Mission Design for International Manned Mars Mission"

90's NASA had 10+ different plans

2000's

- SERP
- DTP/NEXT
- NEP Gravity
- DRA 5 (nee' DRM 1, 3, 4)
- MARSPOST
- ESA Aurora Program
- ESA/Russia plan
- European Mars Mission
- China: "Mission to Mars and Beyond"
- 2-4-2 (SRE approved)
- Boeing: "Conceptual Space Vehicle Architecture" & "Mars Personnel Lander"
- Dutch commercial: **Mars One** (landing in 2023! With a reality TV show!)
- Inspiration Mars Foundation
- "Boeing Affordable Mission"
- "Journey to Mars"
- "Moon to Mars"
- **SpaceX "Red Dragon"** landing in 2018! (wait, now 2022)
- Mars Base Camp
- Deep Space Transport

Current predictions: NASA 2030's, Russia early 2040's.

A wide-angle photograph of a desolate, rocky landscape. The foreground is filled with numerous grey, angular rocks of various sizes scattered across a reddish-brown, sandy terrain. In the middle ground, the terrain continues with more rocks and a few small, dark patches. The background features a large, smooth, rounded mountain or volcano that dominates the horizon. The sky is a uniform, hazy orange-brown color, suggesting a dusty or hazy atmosphere. The overall scene is arid and barren.

Let's get going.

A wide-angle photograph of a desolate, rocky landscape under a hazy, orange-tinted sky. In the foreground, several large, smooth, greyish-brown rocks are scattered across the reddish-brown soil. The middle ground is filled with a vast field of smaller, similar rocks. In the background, a large, rounded, reddish-brown mountain rises against the sky, with other smaller hills visible in the distance.

YEARS OF ADVANCE NOTICE!

NO EXCUSES



Spread your upgrades
like **peanut butter**.

Commit to **TWO OSes**
to support.



12 months

– Vacations

– Holidays

– Slow periods

– Release freezes

= 9 usable months



1-3 months validating
& prepping your
environment



New installs of old OS
forbidden!



1,000 servers

120 working days

10 servers per day!

A wide-angle photograph of a desolate, rocky landscape under a hazy, orange-tinted sky. In the foreground, several large, light-colored, angular rocks are scattered across a reddish-brown, sandy ground. The middle ground is filled with a dense field of smaller, similar rocks. In the background, a large, rounded, reddish-brown mountain rises against the sky, with other smaller hills visible in the distance. The overall scene is arid and barren.

Validate **your software**
first.



```
# apt-get update;  
# apt-get dist-upgrade;  
# do-release-upgrade  
# _
```

```
Your_metric{  
  region=eu,  
  hostname=a,  
  os-release=20.04LTE,  
  os-bin=a7,  
  ...  
} 31337
```



Easy dashboarding!

```
$ echo $HOSTNAME \  
| {md5,sha*}sum \  
| cut -c 1-2
```

A8

\$

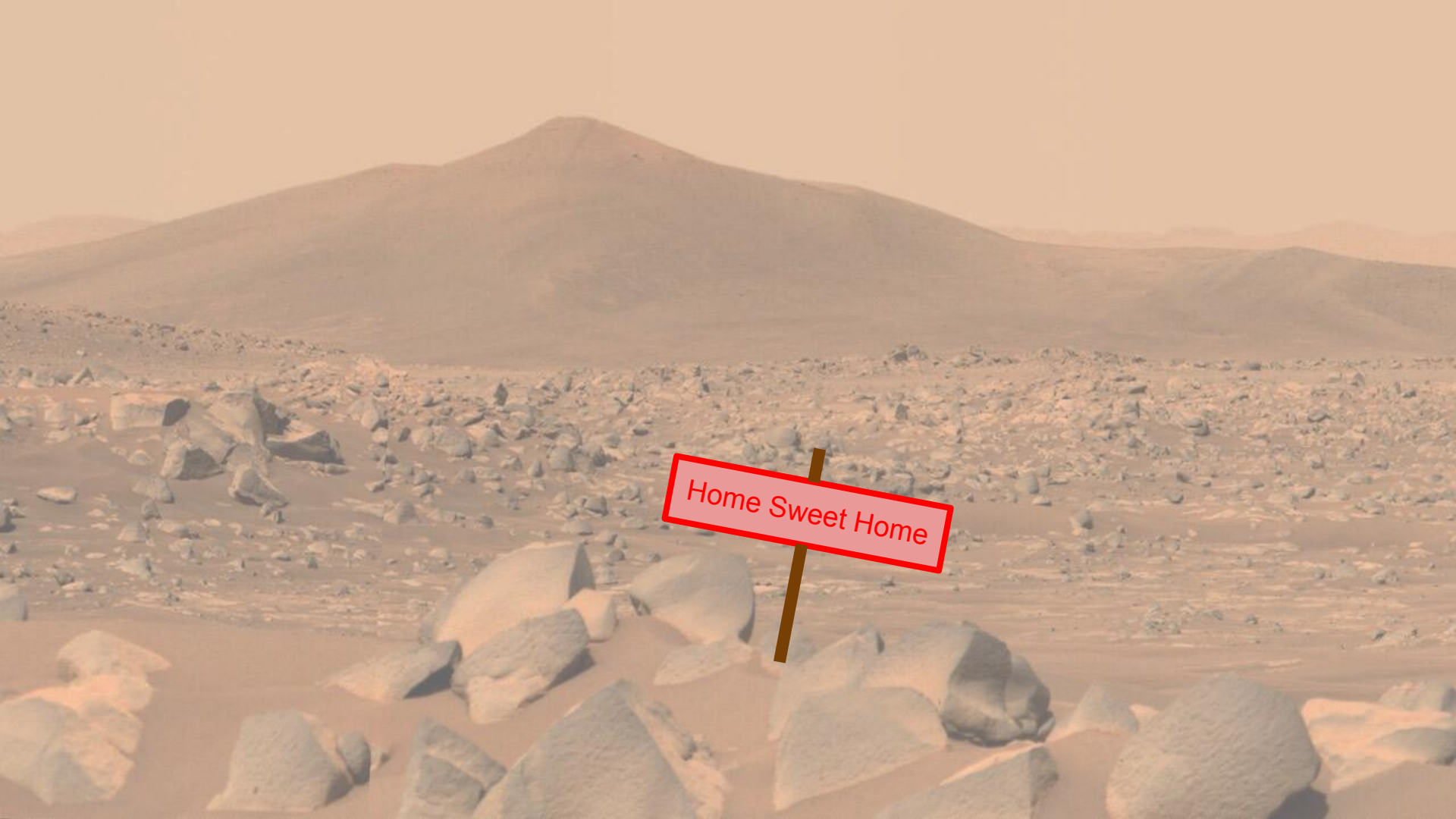
_



```
$ dig os-bin.example.com IN TXT \
  | grep -v \;
os-bin.example.com. 3580 IN TXT "7e"
$ _
```



**Today's max bin
number!**



Home Sweet Home