

Calcular la disponibilidad del sistema si tenemos dos réplicas de cada elemento (en total 3 elementos en cada subsistema).

Disponibilidades iniciales		Con 2 elementos en cada subsistema	
Component	Availability	Component	Availability
Web	85%	Web	97.75%
Application	90%	Application	99%
Database	99.9%	Database	99.9999%
DNS	98%	DNS	99.96%
Firewall	85%	Firewall	97.75%
Switch	99%	Switch	99.99%
Data Center	99.99%	Data Center	99.99%
ISP	95%	ISP	99.75%

$$\text{Web}_3 = 97.75\% + (1 - 97.75\%) * 85\% = 99.6625\%$$

$$\text{Aplication}_3 = 99.00\% + (1 - 99.00\%) * 90\% = 99.9\%$$

$$\text{Database}_3 = 99.9999\% + (1 - 99.9999\%) * 99.9\% = 99.9999999\%$$

$$\text{DNS}_3 = 99.96\% + (1 - 99.96\%) * 98\% = 99.9992\%$$

$$\text{Firewall}_3 = 97.75\% + (1 - 97.75\%) * 85\% = 99.6625\%$$

$$\text{Switch}_3 = 99.99\% + (1 - 99.99\%) * 99\% = 99.9999\%$$

$$\text{Data Center}_3 = 99.99\% + (1 - 99.99\%) * 99.99\% = 99.999999\%$$

$$\text{ISP}_3 = 99.75\% + (1 - 99.75\%) * 95\% = 99.9875\%$$

$$\text{Disponibilidad total 3} = 99.6625\% * 99.9\% * 99.9999999\% * 99.9992\% * 99.6625\% * 99.9999\% * 99.999999\% * 99.9875\% = 99.21\%$$