

## Pricing for US East Instances on Amazon EC2

Instance Type	On-Demand	On-Demand	Reserved	Reserved	Reserved	Reserved
Operating System	LINUX/UNIX	WINDOWS	LINUX/UNIX	WINDOWS		
Type   SubType \ Term	\$ Per Hour	\$ Per Hour	\$ Per Hour	\$ Per Hour	\$ Per Year	\$ Per 3-Year
Standard   Small	0.0850	0.1200	0.0300	0.0500	227.5000	350.0000
Standard   Large	0.3400	0.4800	0.1200	0.2000	910.0000	1400.0000
Standard   Extra Large	0.6800	0.9600	0.2400	0.4000	1820.0000	2800.0000
Micro   Micro	0.0200	0.0300	0.0070	0.0130	54.0000	82.0000
High-Memory   Extra Large	0.5000	0.6200	0.1700	0.2400	1325.0000	2000.0000
High-Memory   Double Extra Large	1.0000	1.2400	0.3400	0.4800	2650.0000	4000.0000
High-Memory   Quadruple Extra Large	2.0000	2.4800	0.6800	0.9600	5300.0000	8000.0000
High-CPU   Medium	0.1700	0.2900	0.0600	0.1250	455.0000	700.0000
High-CPU   Extra Large	0.6800	1.1600	0.2400	0.5000	1820.0000	2800.0000
Cluster Compute   Quadruple Extra Large	1.6000	NA	0.5600	NA	4290.0000	6590.0000

## How long do you have to run a reserved instance for it to be cheaper than an on-demand one?

Example (Standard Small Linux Instance)

Cost Reserved Instance =  $227.5 + x * 0.03$

Cost On-Demand Instance =  $x * 0.085$

>  $x = 4136.36$  hours

>  $x = 172.35$  days

> in use 47,22 % of the time during a year

Term	1 year	1 year	1 year	1 year	1 year	1 year
Operating System	LINUX/UNIX	LINUX/UNIX	LINUX/UNIX	WINDOWS	WINDOWS	WINDOWS
Type   SubType	In Hours	In Days	In %	In Hours	In Days	In %
Standard   Small	4136.3636	172.3485	47.2188	3250.0000	135.4167	37.1005
Standard   Large	4136.3636	172.3485	47.2188	3250.0000	135.4167	37.1005
Standard   Extra Large	4136.3636	172.3485	47.2188	3250.0000	135.4167	37.1005
Micro   Micro	4153.8462	173.0769	47.4183	3176.4706	132.3529	36.2611
High-Memory   Extra Large	4015.1515	167.2980	45.8351	3486.8421	145.2851	39.8041

High-Memory   Double Extra Large	4015.1515	167.2980	45.8351	3486.8421	145.2851	39.8041
High-Memory   Quadruple Extra Large	4015.1515	167.2980	45.8351	3486.8421	145.2851	39.8041
High-CPU   Medium	4136.3636	172.3485	47.2188	2757.5758	114.8990	31.4792
High-CPU   Extra Large	4136.3636	172.3485	47.2188	2757.5758	114.8990	31.4792
Cluster Compute   Quadruple Extra Large	4125.0000	171.8750	47.0890	NA	NA	NA
<b>Term</b>	3 year	3 year	3 year	3 year	3 year	3 year
<b>Operating System</b>	LINUX/UNIX	LINUX/UNIX	LINUX/UNIX	WINDOWS	WINDOWS	WINDOWS
<b>Type   SubType</b>	In Hours	In Days	In %	In Hours	In Days	In %
Standard   Small	6363.6364	265.1515	24.2148	5000.0000	208.3333	19.0259
Standard   Large	6363.6364	265.1515	24.2148	5000.0000	208.3333	19.0259
Standard   Extra Large	6363.6364	265.1515	24.2148	5000.0000	208.3333	19.0259
Micro   Micro	6307.6923	262.8205	24.0019	4823.5294	200.9804	18.3544
High-Memory   Extra Large	6060.6061	252.5253	23.0617	5263.1579	219.2982	20.0272
High-Memory   Double Extra Large	6060.6061	252.5253	23.0617	5263.1579	219.2982	20.0272
High-Memory   Quadruple Extra Large	6060.6061	252.5253	23.0617	5263.1579	219.2982	20.0272
High-CPU   Medium	6363.6364	265.1515	24.2148	4242.4242	176.7677	16.1432
High-CPU   Extra Large	6363.6364	265.1515	24.2148	4242.4242	176.7677	16.1432
Cluster Compute   Quadruple Extra Large	6336.5385	264.0224	24.1116	NA	NA	NA

### **How do we find the Optimal Division between Reserved and On-Demand Instances?**

By determining how many instances you need longer or equal to the time given in the table above.