



Cisco AppDynamics APM

- Application Performance Management (APM)

AppDynamics Licensing

AppDynamics New Licensing Model

AppDynamics currently have two licensing model as of February/March 2021

- Agent Based Licensing Model – This licensing model will continue to exist until next year 2022
- Infrastructure based licensing model – The new licensing model

The slight change in AppDynamics licensing model was announced earlier in the year(2021). AppDynamics added the IBL – Infrastructure Based Licensing to existing licensing model.

The IBL model is simply based on **CPU core count**. This means that licenses will be based on one AppDynamics license per CPU core count. 1 License unit = 1 CPU core

Benefits includes avoiding over purchasing, issues with license swapping etc.

CPU CORE COUNT – What is this?

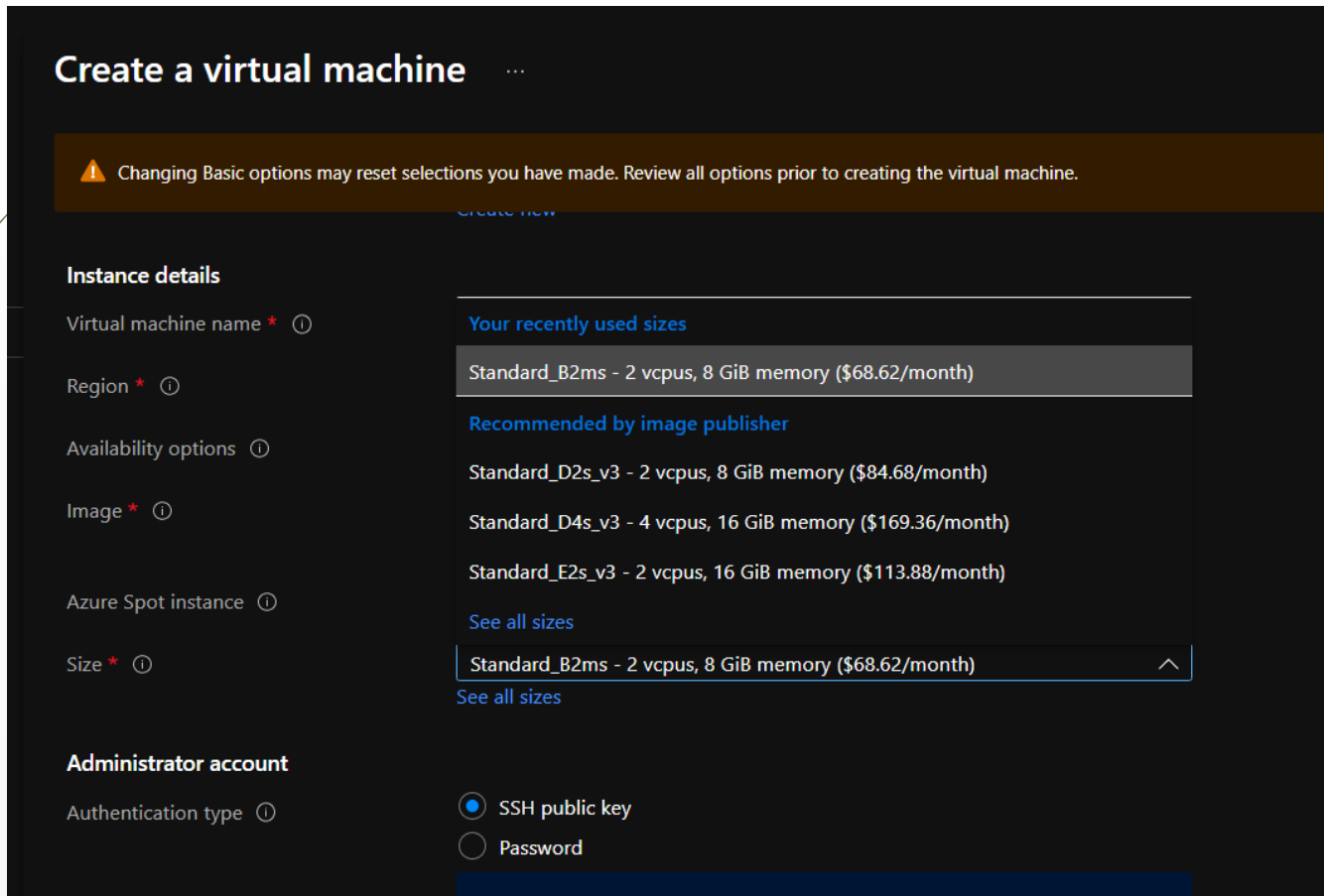
We all know that vCPU is representation of a select portion of physical CPU that is assigned to a virtual machine that is running any kind of workload.

CPU Core can be based on factors like physical cores, sockets and hyperthreading. Hyperthreading (Intel) is a process where a CPU splits each of its **physical** cores into **virtual** cores, which are known as threads




How to Determine the CPU core Count

In calculating CPU Cores, you need to first identify whether the environment is cloud or On-premise. CPU core count calculation in the cloud like Azure, AWS and GCP is very straightforward. Example below



Create a virtual machine ...

 Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

[Create new](#)

Instance details

Virtual machine name * ⓘ

Region * ⓘ

Availability options ⓘ

Image * ⓘ

Azure Spot instance ⓘ

Size * ⓘ

Administrator account

Authentication type ⓘ

☒ SSH public key

☐ Password

Your recently used sizes

Standard_B2ms - 2 vcpus, 8 GiB memory (\$68.62/month)

Recommended by image publisher

Standard_D2s_v3 - 2 vcpus, 8 GiB memory (\$84.68/month)

Standard_D4s_v3 - 4 vcpus, 16 GiB memory (\$169.36/month)

Standard_E2s_v3 - 2 vcpus, 16 GiB memory (\$113.88/month)

[See all sizes](#)

Standard_B2ms - 2 vcpus, 8 GiB memory (\$68.62/month) ^

[See all sizes](#)

How to Determine the CPU core Count

In on premise is a bit more challenging as you need to find things yourself. AppDynamics recommends using machine agent to find out the number of CPU cores where possible. Where its not possible, follow this general guideline

Technology	Logical CPU Core	How to Capture
Bare Metal	Logical CPU Cores = No of Processors	Windows * Use task manager • Use PowerShell <code>get-wmiobject Win32_ComputerSystem format-list *proc*</code> • Linux <code>lscpu</code>
Virtual Machine	Logical CPU Cores (Inclusive of hyperthreading)	Windows * Use task manager • Use PowerShell <code>get-wmiobject Win32_ComputerSystem format-list *proc*</code> • Linux <code>lscpu</code>

Two Separate Licensing Model

Core Packages – End to End Monitoring		
	Premium Edition	Enterprise Edition
APM	☒	☒
DBMon	☒	☒
Inframon (SIM,NetViz)	☒	☒
BIQ*	☐	☒

Infra-Only Packages (Addon)	
	Infrastructure Monitoring Edition
Inframon (SIM)	☒

BIQ covered here only addresses business performance monitoring using transaction analytics. Log analytics is not part of it.

New licenses requires controller version 21.4.x and above.

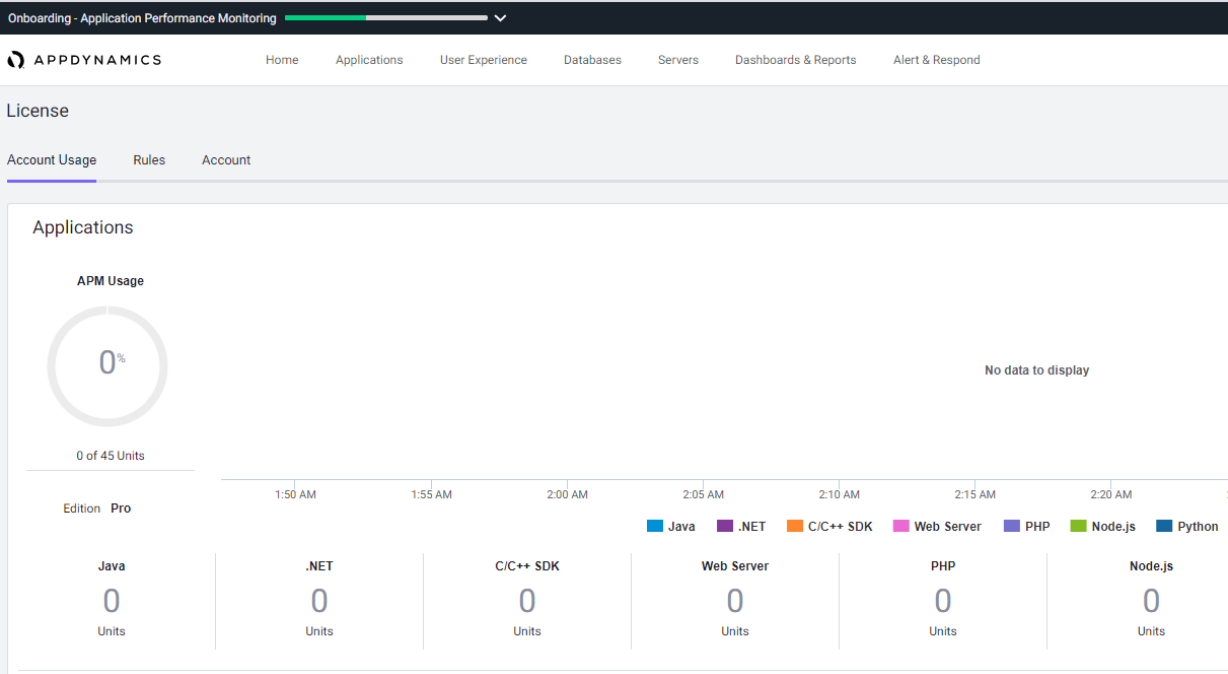
Other licenses – Licensed separately

- Real User Monitoring licensed separately – 1 pageviews = 1 Rum Token, 1 Active Agent (Mobile App) = 160 Rum Token
 - Log Analytics is licensed separately – Based on log size. 1 License = 5GB log size / 24HR period
 - Synthetic Monitoring – Based on synthetic Time Blocks (STB) –
- Note also that you know get 400,000 Events per Transaction analytics license in the recent licensing model while the agent-based model offers 1,000,000 events per transaction analytics.

<https://www.appdynamics.com/pricing>

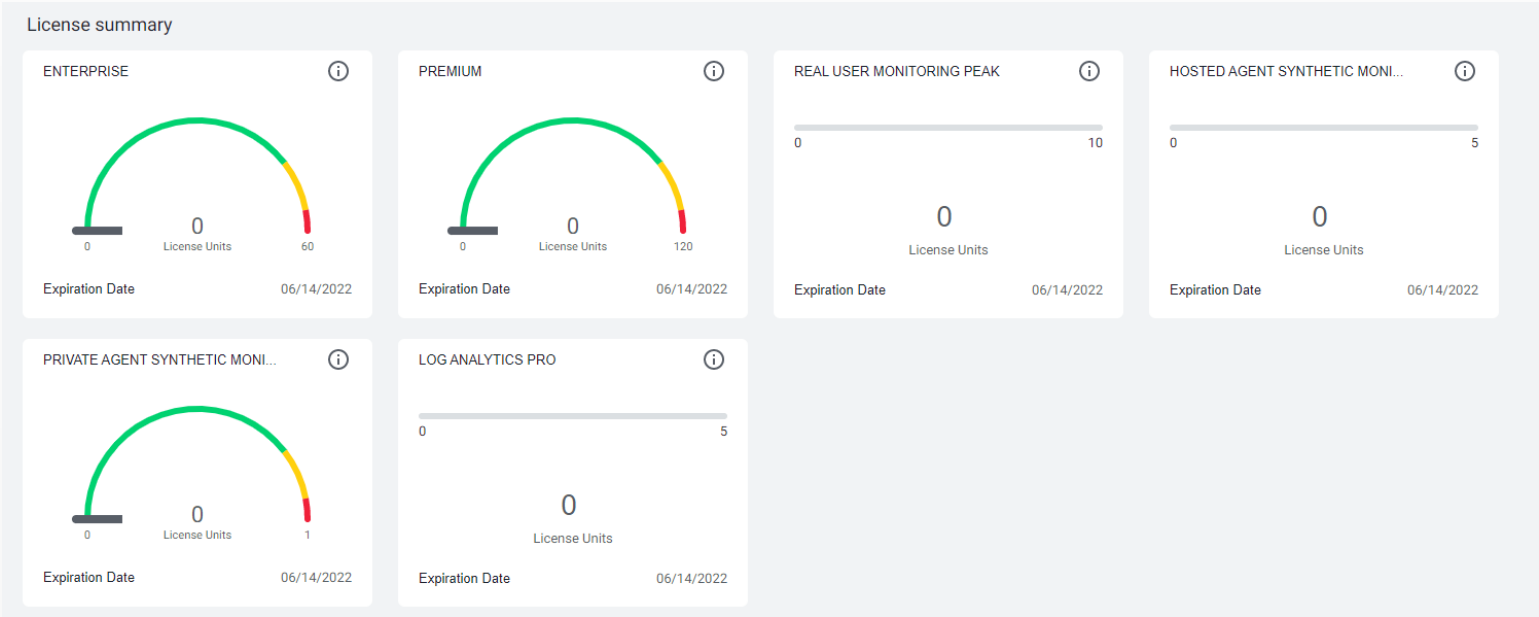
<https://docs.appdynamics.com/21.6/en/appdynamics-essentials/licensing/license-entitlements-and-restrictions>

Compare old and new License page



Old license page

New license page



AppDynamics License Calculations – Compare IBL and Older license Model

Your small organization is starting a digital transformation program by starting an ecommerce platform that will server her customer base on both mobile and laptops. The start this the IT unit is going to build a simple tomcat application that will be hosted internally on just **one** Centos 7 operating system. The application will be storing customer data on a central MySQL database. The centos 7 virtual machine has been provisioned by IT to use **2 CPU core** and 16GB Ram with 100GB hard drive space for a start. The MySQL is just on **1 Core CPU** as its not very busy. They have small customer base of about **10,000** users. Calculate the AppDynamics license that will be required for three scenario

1. End to End Monitoring without business performance (E2E without BPM) – Note: E2E (Includes server visibility)
2. End to End Monitoring with Business performance monitoring (E2E with BPM)
3. End to End Monitoring with business performance monitoring and real user monitoring for mobile

	Gen 1 (Agent based licensing Model)	Gen 2 (Agent based licensing Model) (Pro, Advanced and Peak License Editions)	Gen 3 (Current) – Infrastructure based licensing model (Premium and Enterprise License Editions)
E2E Without BPM	1 App License 1 Database visibility license 1 Server Visibility License Total = 3	1 Advanced License 1 Database License Total = 2	3 Premium License Total = 3
E2E with BPM	1 App License 1 Database visibility license 1 Server Visibility License 1 Transaction Analytics Total = 4	1 Peak License 1 Database License Total = 2	3 Enterprise License Total = 3
E2E with BPM and RUM	1 App License 1 Database license 1 Server Visibility License 1 Transaction Analytics 2 MRUM license (1 license = 5000 Active users (MAU) in 1 month calendar) Total = 6 1 Transaction Analytics license = 1,000,000 events	1 Peak License 1 Database License 2 MRUM license (1 license = 5000 Active users (MAU) in 1 month calendar) Total = 4 1 Transaction Analytics license = 1,000,000 events	3 Enterprise License 1RUM = 10,000,000 tokens 1 Active Agent(device) = 160 token. So, for 10,000 Active devices – 10,000 x 160 token x 12months will be required = 19,200,000 tokens. Since 10,000,000 tokens = 1 RUM Pro license then 19,200,000 / 10,000,000 = 1.92 - approx. 2 RUM Pro licenses will be needed to deliver 19,200,000 tokens for 10,000 unique mobile devices. Total = 3 + 2 = 5 1 Transaction Analytics license = 400,000 events



The END