

Builders Online Series

Fit for purpose operating systems:
Get started with the right operating system
for your workload

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Moving to cloud is an opportunity to modernize

Move

- Typical application portfolio is ~1,000+
- Hundreds of vendors in an enterprise
- Server architectures-often monolithic
- Physical and virtual on-premises
- 10-60% in house developed applications
- In perpetuity licensing:
 ~10-30% under-used
- High potential for cost rationalization





SaaS

- Serverless
- Amazon EC2 AMIs
- Containers

On-premise



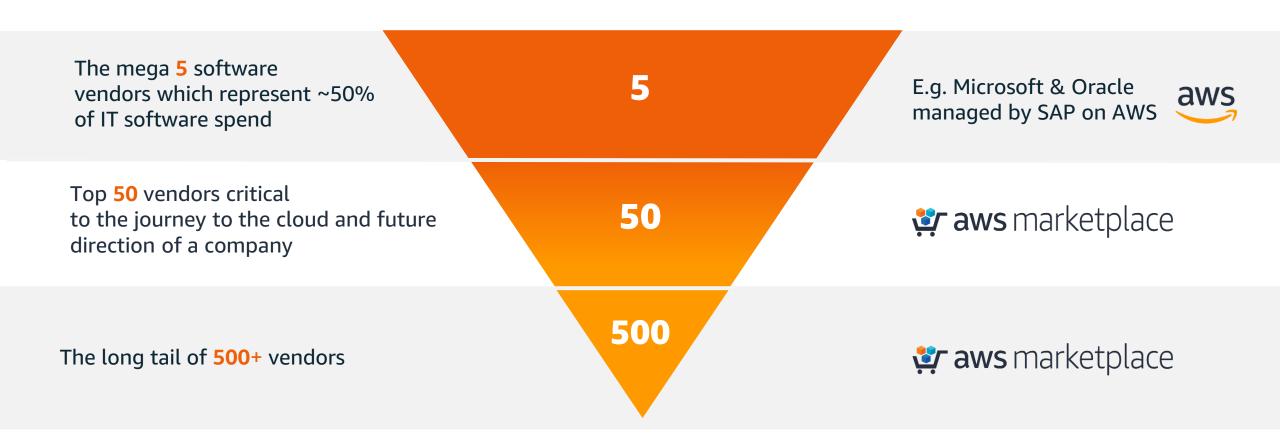
Retire

20%+ on-premise software applications



Transforming your portfolio

The 5/50/500 model (~15–25% of the IT budget is software)



Curated digital software catalog

Helping customers find, buy, deploy, and manage third-party software



Over 8,000 listings



290,000 active customers



1,600+ software vendors



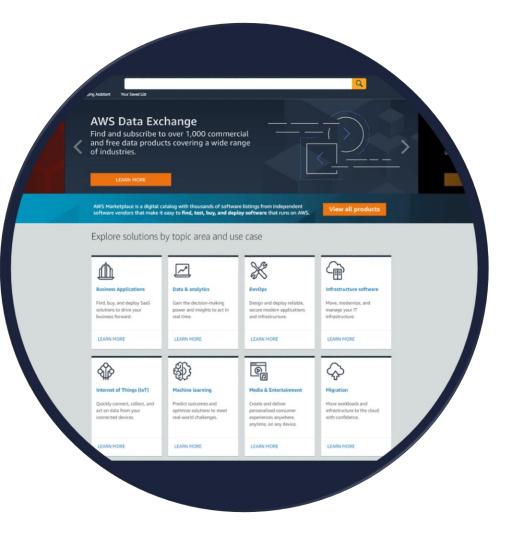
Over 850 million hours of EC2 deployed monthly



Deployed in 24 launched regions



Offers 50 categories



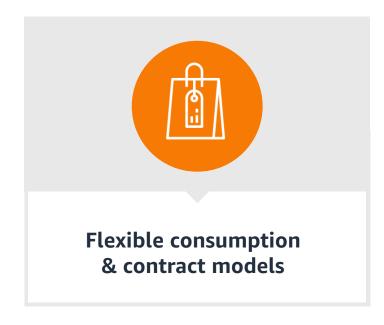


Why AWS Marketplace: A buyer's perspective



Choose from a variety of deployment options and get the software needed in a matter of minutes

deployment



Pay-as-you-go or choose from a selection of pricing and contract options to receive discounts and/or custom terms



All software in AWS Marketplace is continuously scanned to ensure reliability and is ready-to-run on AWS



What is Fit for purpose OS?

Dictionary: Fit for purpose

Phrase of fit: Well suited for its designated role or purpose

Fit-for-Migration

Fit-for-Building

Fit-for-Experiment



What we will be focusing on today

Operating Systems





Amazon Linux 2



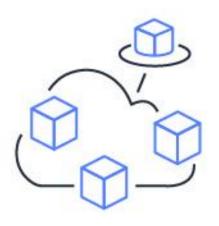






Demo 1: Finding and launching deep learning Amazon Machine Images (AMI) from marketplace

Value for customers







Build



Experiment



Migration

Current IT snapshot Discover & organize data Migration strategies for each workload (i.e. 7Rs) Refactor App Performance **Applications** Re-platform **Asset** configuration Information inventories data Repurchase Infrastructure Level Rehost of effort Performance Relocate **CMDB** SLA/OLA Architecture Retain Retire Migration strategy decision criteria should be based on both business and technical needs Tribal knowledge

SUSE for SAP optimized for AWS





SUSE Linux Enterprise Server for SAP applications

- ✓ SUSE public cloud update infrastructure
- ✓ Packages and drivers for enhanced AWS experience
- ✓ Single point of contact for support model
- ✓ Flexible procurement options (PAYG, annual subscriptions, RI)



ENGIE seeks to digitally transform and streamline financial processes using SAP S/4HANA on AWS

https://aws.amazon.com/solutions/case-studies/engie/

Quick start: https://aws.amazon.com/quickstart/architecture/sap-hana/



Build



Amazon Linux 2





Fit for building

Speed, simplicity and scalability

General	purpose
operatin	g system

Amazon Linux 2
CentOS
Debian 9,10
Red Hat Enterprise Linux
Suse Linux Enterprise Server
Ubuntu

Freedom to build exactly as you need

Optimized images for targeted use cases

Microsoft Windows, Red Hat or Ubuntu with SQL Server NGINX on CentOS 7 ElasticSearch on Debian 10 Redis Enterprise on Amazon Linux 2

Operating system and just the application you need

Fully integrated stacks

MEAN – Mongo, Express, Angular and Node.js on Debian 10 LAMP – Apache, MySQL, PHP 7.2 on Amazon Linux 2 Wordpress on CentOS 7 Magento 2.3.5 with Redis, Apache, MySQL and PHP on Ubuntu

Launch, configure, and get building applications in minutes



Amazon Linux 2: Native integration + ISV ecosystem

Amazon Linux 2 includes AWS applications

- The AWS Command Line Interface (CLI)
 package contains apps to manage 175 AWS
 services from the command line, and it's
 included in the AMI.
- This greatly simplifies deployment:
 - Launch the AMI and start working with AWS services immediately.
 - No integration necessary, it just works.

Amazon Linux 2 ready partners





CentOS selection in AWS Marketplace

660 CentOS based products, from 60 vendors

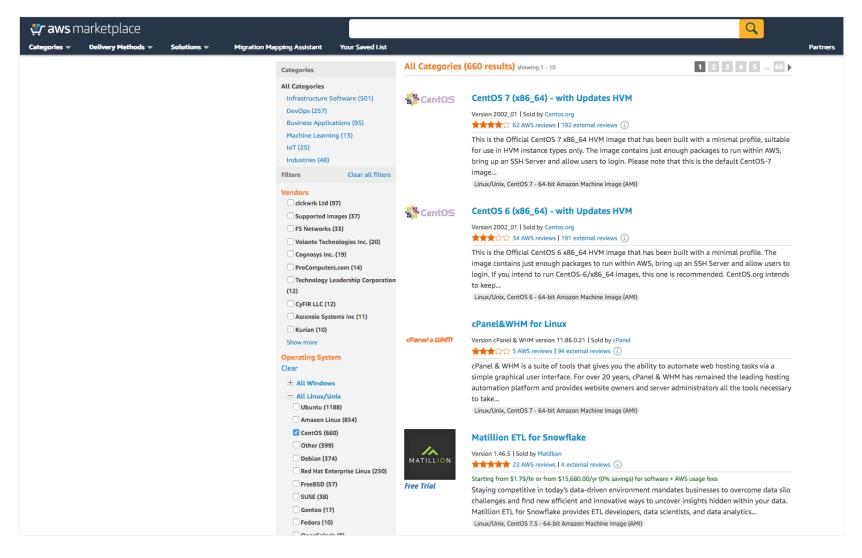
Example stack:

FPGA Developer AMI

https://aws.amazon.com/marketplace/pp/ B06VVYBLZZ?qid=1595583669515&sr=0-4&ref_=srh_res_product_title

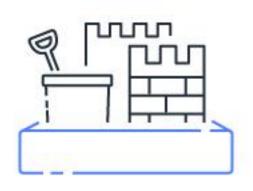
Kusanagi Wordpress

https://aws.amazon.com/marketplace/pp/B017690GMY?qid=1595583937874&sr=0-1&ref_=srh_res_product_title





Experiment



Containers, blockchain, and AI and machine learning acceleration with AWS Marketplace

Fit for experiment

Containers







Deep learning





Blockchain







Fit for experiment



Deploy container services with Amazon ECS-Optimized and Amazon EKS-Optimized Amazon Linux 2 AMI.



RancherOS runs Docker directly on top of the Linux Kernel, and distributes all user-space Linux services as Docker containers.



Cloud ready image with support for Docker based containers. In addition to Docker this image contains Docker Machine and Docker Compose.



Fit for deep learning



Pre-built and optimized images for deep learning on EC2 with NVIDIA CUDA, cuDNN, and Intel MKL-DNN.



Includes popular frameworks such as TensorFlow, MXNet, PyTorch, Chainer, Keras, and debugging and hosting tools such as TensorBoard, TensorFlow Serving, and MXNet Model Server.



Fit for blockchain



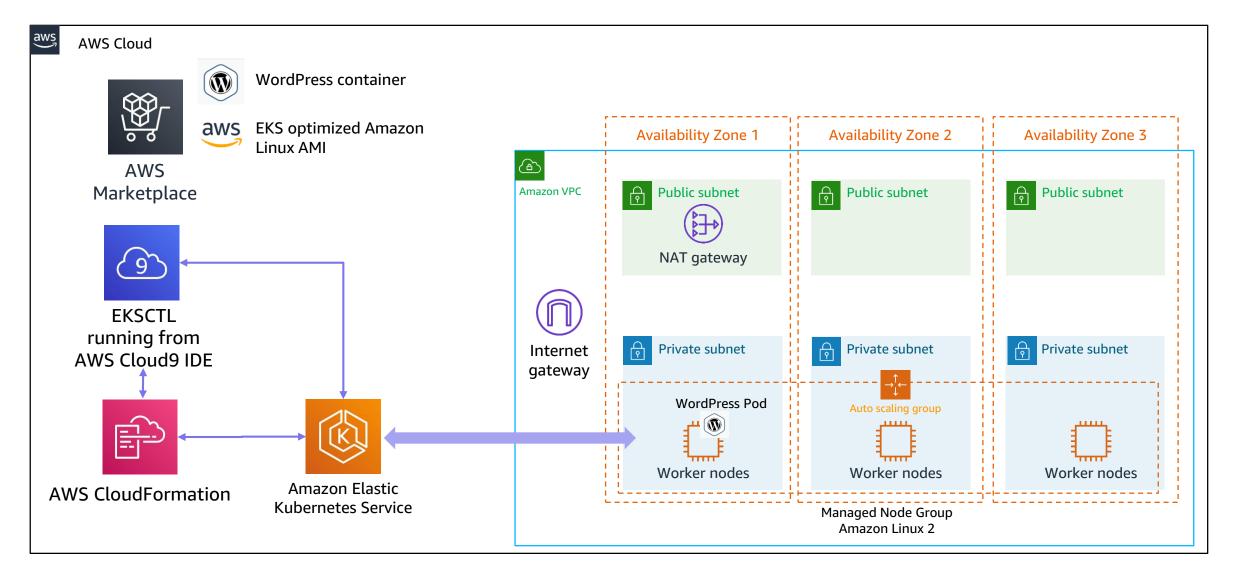
Images optimized for Blockchain, distributed ledger and smart contract development.



Includes frameworks such as Truffle Ethereum Development Kit, C++ libraries, Node.js built in.



Demo architecture



Demo 2: Wordpress container running on Amazon Elastic Kubernetes Service (Amazon EKS) cluster

Wrap-up

- AWS Marketplace supporting builders as a central entry point to discover, buy, deploy, and manage cloud software running on AWS
- AWS Marketplace fit-for-purpose operating system supporting builders in their journey to migrate, build, and experiment on AWS Cloud by offering OS system of choices that are optimized for different development needs and workload types
- Fit-for-purpose OS and partner solutions that are built on top can be accessed and launched via both AWS Marketplace, AWS Management Console, and other AWS services such as Amazon ECS and EKS



Get started



https://aws.amazon.com/marketplace

AWS Digital Training



Flexibility to Learn Your Way

Build cloud skills with 550+ free digital training courses, or dive deep with classroom training

Featured Courses

AWS Cloud Practitioner Essentials (Second Edition)

Learn the fundamentals of the AWS Cloud and prepare for the AWS Certified Cloud Practitioner exam.

Amazon DynamoDB for Serverless Architectures

An introduction to Amazon DynamoDB and how it's leveraged in building a serverless architecture.

AWS Security Fundamentals

Learn fundamental cloud computing and AWS security concepts, including AWS access control and management, governance, logging, and encryption methods.

Getting Started with Amazon Simple Storage Service (Amazon S3)

The course provides you with the knowledge to determine when to use Amazon S3 by reviewing typical use cases and understanding how the service provides object storage for your applications.

Thank you for attending AWS Builders Online Series

We hope you found it interesting! A kind reminder to **complete the survey**. Let us know what you thought of today's event and how we can improve the event experience for you in the future.

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Thank you