Cloud Offering Specification Brief

Offering name: RHEL for HPC in Azure Marketplace

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Last revision date: 8/13/2024

SBAR (if available)

This doc is the deliverable from Phase 1 of the [offering blueprint](link) process, and is the minimum information required for the teams in the next phase to start their work.

Market Opportunity – Why is this offering needed and how big is the market opportunity? Is this opportunity incremental to the current RHEL business? (no deal specific listings)

- Enterprise HPC customers often burst from on-premises into the cloud to expand their HPC cluster capacity in order to shorten time-to-completion for their HPC jobs. Buying standard subscriptions for their peak usage is financially untenable, and a "metered, on-demand" offering is required to accommodate their peak usage when it's required. Metered, PAYGO, pre-built cloud offerings are perfect for this type of usage because they:
  - Only incur costs when they're used
  - Simplify deployment
  - Offer committed spend burn-down opportunities
  - Helps customers manage CAPEX

  There are named, shared Azure customers (e.g. Volvo, BMW, STMicro, Vestas, BASF, etc.) with known total >10k instances in EMEA that are looking for a faster and streamlined deployment method for RHEL for HPC based on a pre-built image with HPC content. This is an excellent springboard for us to create the RHEL for HPC marketplace offering in Azure, and followed quickly by AWS (2025Q1/Q2).

Market Dynamics – Why now? (include competitive landscape)

- Other competitor operating systems have tailored HPC images to smooth out the deployment for Azure HPC customers, including [SUSE](link) and [Alma](link). RHEL is at a

competitive disadvantage and known customers have been using competitor alternatives to overcome this deployment friction.

Market Problem – Why does the customer care? What challenges are they facing?

- Anecdotally, Microsoft has told us that there are known shared customers who want to use RHEL for HPC on Azure, but took months to deploy an image (as compared to hours with competitors) due to the lack of a pre-built, opinionated HPC image and offering on Azure. As a result, several of these customers have chosen to use competitor products due to the extreme friction.

What is our Solution? – define the offering. (include differentiators)

- The offering would include a pre-built RHEL for HPC image which includes HPC content that customers would otherwise need to build themselves. This is differentiated from standard RHEL as it will include more content, but more to gain parity with competitor offerings in Azure as competitor products already offer this opinionated experience.
- The image itself will be a standard RHEL image with an associated Ansible system role that will install the necessary and appropriate HPC content for this segment of customers. The building and supporting of the system role will be a combination of the Red Hat Ansible team and Azure engineering, with the division of work TBD.
- Product Management will need to work with Engineering and the pattern's technical team to determine specific content requirements.

This document describes some specific customers and their specific needs:

🟩 RHEL HPC Requirements

This is what the Azure team has for building images for other distributions (Alma and Ubuntu)

https://github.com/Azure/azhpc-images
https://github.com/andygeorgi/azhpc-images/tree/master/rhel

Need pricing model that is based on current HPC subscription offerings that reflects scalable pricing model and realities of cloud HPC deployments.

Blocker for GTM: Content / instructions needed about architecture of an HPC deployment and how to easily burst into the RHEL for HPC in the cloud (i.e. how cloud compares to on-premises, head node and compute nodes vs. just compute nodes, where does control come from?)

Define the Ideal Customer – Who would buy this and why? (include target personas)

- The ideal customers are existing RHEL customers and HPC architects who want to expand into the cloud. This is a known usage pattern, and the friction of deployment is blocking this additional business.

What Does Success Look Like? – What are our strategic goals? (include financial metrics)

- Customers will have a full RHEL experience for HPC - flexible for both on-premises and cloud usage. This is a known pattern in enterprise HPC, and we need to open this route for RHEL for HPC. This achieves the goals of customer retention as well as expanding the average RHEL for HPC customer spend.

What are our Routes to Market – (do you have buy-in from route owners?)

- ☑ Red Hat sales (enterprise, commercial, DST)
- ☐ Resellers - pursuing this (Kevin Kennedy) **- N/A till Q3 per Kevin**
- ☐ Distributors - pursuing this (Connie Noyes) **- N/A per Connie. Distis don't have access to consumption offerings (as of 1/20/25)**
- ☐ SI (Rob McMahon)
- ☐ MSP (Kevin Kennedy)
- ☐ ISV - (Rob McMahon)
- ☐ OEM - (Ryan King)
- ☑ Cloud (specify which cloud partners) - Azure (Melissa Webb)

Listing details – What type of listing will this be?

- ☐ 1p/console
- ☑ 3p/marketplace
- ☐ Both 1p and 3p
    - ○ Rationale -
- ☐ SaaS
- ☑ Image-based / AMI
    - ○ Rationale -
- ☐ Will it affect any existing listings
    - ○ Explain
- ☐ Are there limitations by region
    - ○ Explain

☐ What about Gov clouds?
  ○ Explain

Procurement options - Will this be hourly/monthly/yearly, etc?

- Hourly

Timeline - Is this offering on the roadmap? (specify quarter, by cloud partners)

- Yes, 4Q

Lifecycle - will this follow our standard lifecycle process?

- Yes, standard lifecycle

Vetting - Has this offering been vetted and approved?

☐ Product portfolio (Karen/Frank)
☑ Cloud partner alliance team (Joe B)
☐ Sales (Bill Hirsch)
☐ Sales programs (Adrian/Rob/Angie)