



# **RHEL for ARM**

## **SuperComputing 2017**

Jon Masters, Chief Arm Architect

# Red Hat ARM Program Milestones

6+ years of investment in building a standardized 64-bit ARM Server ecosystem

**MARCH 2011**  
Red Hat ARM  
team formed

**JAN 2012**  
OpenJDK port  
for AArch64

**NOV 2012**  
Red Hat co-founded  
Linaro Enterprise Group

**JAN 2014**  
SBSA specification  
released by ARM

**JULY 2014**  
Red Hat launches ARM  
Partner Early Access Program

**JUNE 2015**  
RHEL Server for ARM  
Development Preview

**NOV 2016**  
RHEL Server for ARM 7.3  
(Development Preview)

**SEP 2017**  
RHEL for ARM 7.4  
(Beta)

2011

2012

2013

2014

2015

2016

2017

# Red Hat Enterprise Linux for ARM

- A build of Red Hat Enterprise Linux for SBSA standards compliant 64-bit Arm Servers
- The same Operating System experience across multiple different architectures
- Provides an industry leading foundation to help our partners build the Arm ecosystem
- Currently available in Beta from Red Hat



Photo: RHEL for ARM runs on  
Qualcomm Centriq 2400

# RHEL 7.4 FOR ARM RELEASE HIGHLIGHTS

**Announcement: November 13, 2017**

- Provides feature parity at the OS layer with x86 and enables development of new solutions in existing (Telco, FSI, HPC) and emerging (ML, IoT) segments
- On November 13th OEMs will have the ability to deliver RHEL for ARM
  - HPE is our initial launch partner and first OEM to certify their platform
  - Primary support contact is HPE with L3 handled by Red Hat
- Standard and premium support options are offered
- New product SKUs for this architecture
  - HPC Head and Compute node SKUs are available
  - Gradual enablement for other variants, add-ons and components



# RHEL FOR ARM RELEASE SPECIFICS

- RHEL 7 offers a common userspace across all supported architectures
- Offers support for bare-metal deployments and includes:
  - gcc 4.8 compilers and tools for C, C++, and Fortran development
  - DTS (Developer Toolset) 7 provides additional GCC 7.x toolchain
  - Java support via OpenJDK7 and 8, as the default JVM
  - Installation, entitlements, and subscription management via Satellite 6.1
- Other Red Hat technologies and products such as virtualization, containers or OpenStack are not supported (see next slides)

# RED HAT ENTERPRISE LINUX ACROSS ARCHES

	X86_64	AArch64
Red Hat Enterprise Linux Server	✓	✓
Red Hat Enterprise Linux Server for HPC Head/Compute node	✓	✓
Red Hat Developer Toolset	✓	✓
Red Hat Software Collections	✓	✓
Java VM	Oracle JDK, OpenJDK	OpenJDK
Atomic Host	✓	-

# RED HAT ENTERPRISE LINUX ACROSS ARCHES

	X86_64	AArch64
Extended update support (EUS) / Extended lifecycle support (ELS)	✓	-
High Availability/Resilient Storage	✓	TBD
Red Hat Enterprise Linux for SAP Solutions	✓	-
Smart Management	✓	TBD
Smart Virtualization	✓	-
.NET on RHEL	✓	-



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