IBM **Power Systems**

Your Roadmap to **POWER9:** Migration Scenarios

IBM **POWER9**

Making the investment to upgrade your systems ensures you have the most reliable foundational infrastructure for your daily operations.

IBM Power Systems have proven to be secure and reliable platforms that you have trusted to handle your most crucial data. By updating your foundation with the latest POWER9-based servers, you can effectively run your mission-critical requirements alongside modern, data-intensive workloads. Investing in POWER9 systems positions you to get the most out of your technology capital investment, and in many cases can provide significant cost savings.

This document provides some example migration scenarios and upgrade considerations of which POWER9-based server(s) may be best for your organization based on the previous generation Power servers currently running in your data center. When you are ready, your IBM sales representative or business partner can provide more specific guidance and a TCO analysis tailored to the specifics of your data center and your organization's business needs.

To schedule a consultation, contact your IBM sales representative or IBM Business Partner, or visit **ibm.com/power**.

IBM POWER9 servers easily integrate into your cloud and cognitive strategy and deliver superior price performance for your mission-critical workloads

Up to
4.6x
faster

IBM **POWER9** S914

Scale-Out Migration Scenario #1

Migrating from a previous Power model?

Previous Models	Recommended Model
All S720 models	S914
S740 up to 16c 3.6 GHz	
All S814 models	
POWER5 i5 515, i5 520, p520/+/Q, i5 525	

Upgrade Considerations

- Always revisit current performance numbers for your situation [1]

- If you are replacing a Power 740, take a close look at your IO requirments

- Software licensing savings are significant for Power 740s with up to 16 cores

- Optimal for entry Oracle workloads and small Oracle Cluster based on the S914

- Due to the new Single Chip Module design, you can populate up to two sockets with up to a total of 24 cores for Oracle SE2, saving you money on licensing costs

- With two one socket systems (S914) you can build a small RAC cluster, increasing the scalability of your datacenter

- PowerVM virtualization is built into the POWER9 chip, boosting performance, increasing server utilization, and instantly cloud enabling your mission critical data

- You can use a temporary license to upgrade from PowerVM Standard to Enterprise and migrate using Live Partition Mobility, making migration more efficient with little downtime

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IBM **POWER9** S922

Scale-Out Migration Scenario #2

Migrating from a previous Power model?

Previous Models	Recommended Model
All S710 models	S922
All S730 models	
All S822 models	
All S750 models	
POWER5 p505, p510/+/Q	

Upgrade Considerations

- Always revisit current performance numbers for your situation

- AIX customers should consider moving towards SMT8 to yield max performance

- PowerVM virtualization is built into the POWER9 chip, boosting performance, increasing server utilization, and instantly cloud enabling your mission critical data

IBM **POWER9** S924

Scale-Out Migration Scenario #3

Migrating from a previous Power model?

Previous Models	Recommended Model
S770 models up to P7 48c	S924
S770 models up to P7 + 36c 4, 22 GHz	
S770 models up to P7 + 48c 3, 8 GHz	
All S740 models	
All S750 models	
All S824 models	
POWER6 520, 550	
POWER i5 550, p550/+/Q	

Upgrade Considerations

- PowerVM virtualization is built into the POWER9 chip, boosting performance, increasing server utilization, and instantly cloud enabling your mission critical data

- Consider moving towards SMT8 to yield maximum performance

- Oracle SE2 offering is available on 2 socket 12 core compared to POWER8 only 1 socket 12 core maximum (DCM vs SCM), saving you money on licensing costs

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