



Building & Securing a S/4HANA Cloud Environment

AI – Cybersecurity – Scalability – Resiliency

Brett Murphy

A blue-tinted photograph of a city skyline at night, featuring several illuminated skyscrapers and a prominent tower with a glowing spherical top. The scene is viewed from a distance, showing a parking lot and some lower buildings in the foreground.

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14
2024

Trusted Advisor

Brett Murphy
Client Executive



brett.murphy@cleartechnologies.net
317-496-7591





<https://www.cleartechnologies.net/sap/>

Passionate evangelist for Enterprise Compute, Storage & Software infrastructure. Recognized specialist in enterprise architecture, software cost reduction and competitive selling. Focus over the past 12 years has been on Architecture & Solution Design for clients running large, complex SAP environments.

<https://www.linkedin.com/in/murphy-brett/>



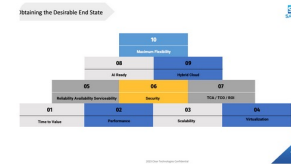
LinkedIn

<https://www.linkedin.com/in/murphy-brett/>



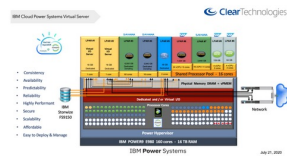
Cloud - Eyes Wide Shut!

Your C-Level executives are looking at cloud - this is just a FACT. The I...
by Brett Murphy • 5 min read



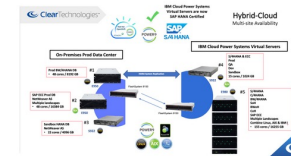
The ideal SAP HANA Platform

Unlike SAP ECC, SAP HANA is supported with 1 x OS and 2 x...
by Brett Murphy • 4 min read



Power in IBM Cloud, just the beginning

IBM and SAP announced today IBM POWER9 is now available and...
by Brett Murphy • 4 min read



Power Systems Virtual Servers IaaS now SAP HANA...

SAP ECC and SAP HANA shops have one more enterprise hosting optio...
by Brett Murphy • 6 min read



Building the S/4HANA Business Case

Not all corporate projects and initiatives are created equal. Addin...
by Brett Murphy • 3 min read



HANA Infrastructure - Peace of Mind

Infrastructure cost is an expected component of any IT project...
by Brett Murphy • 3 min read



We are a single point of contact, committed to consistently delivering the solution and services that are the best fit for your business.

- 30-year Value-Added Reseller
- Long history with Systems & Storage
- Strategic focus on SAP, and other innovative solutions
- Extraordinary Net Promotor Score
- Cognitive Leadership Program
- 3 IBM Champions



Core Portfolio



- Traditional Infrastructure VAR
 - Compute, Storage & Networking
- SAP Infrastructure Practice
- Security Practice
- Small Managed Service Practice
- Infrastructure Consulting Services
- Woman owned business (WBENC)



- Cloud based storage reporting, capacity planning and analytics
- VMware vSphere and SAN multi-platform storage dashboard
- Proactively audit and monitor IT infrastructure



Clear's SAP Practice

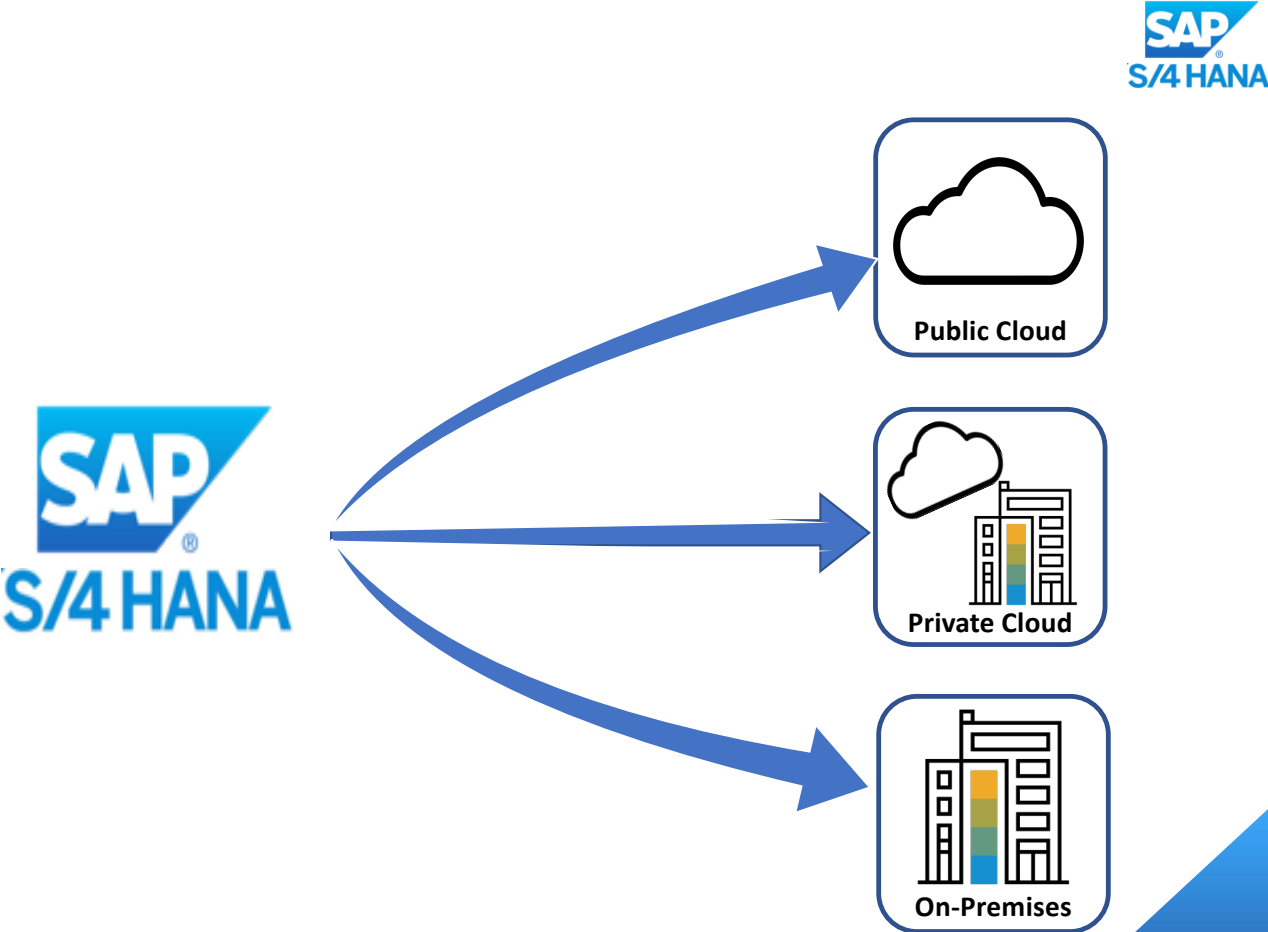


- On-premises, Private Cloud and Public Cloud hosting & infrastructure reseller
- HANA sizing
- Hardware, Software & Services focused

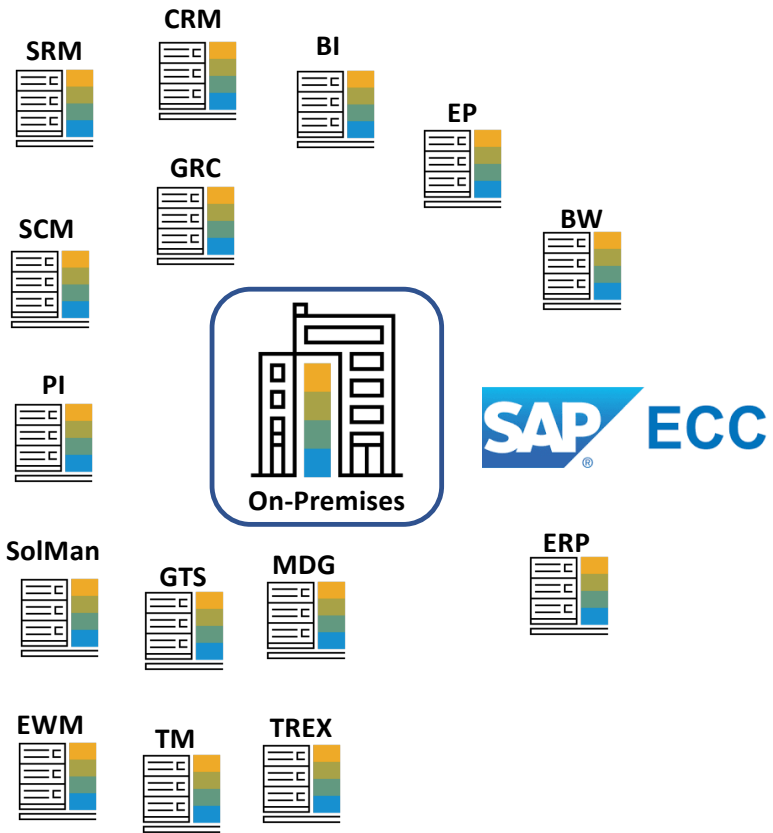
- \$0 SAP HANA Readiness Assessment
- \$0 Cyber Resiliency Assessment
- Storage Capacity & Planning Assessment
- Affiliated with a SI Partner
- Affiliated with Migration Partner(s)
- Affiliated with Managed Service Partner(s)



Hosting HANA



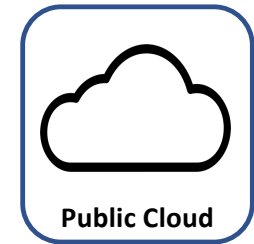
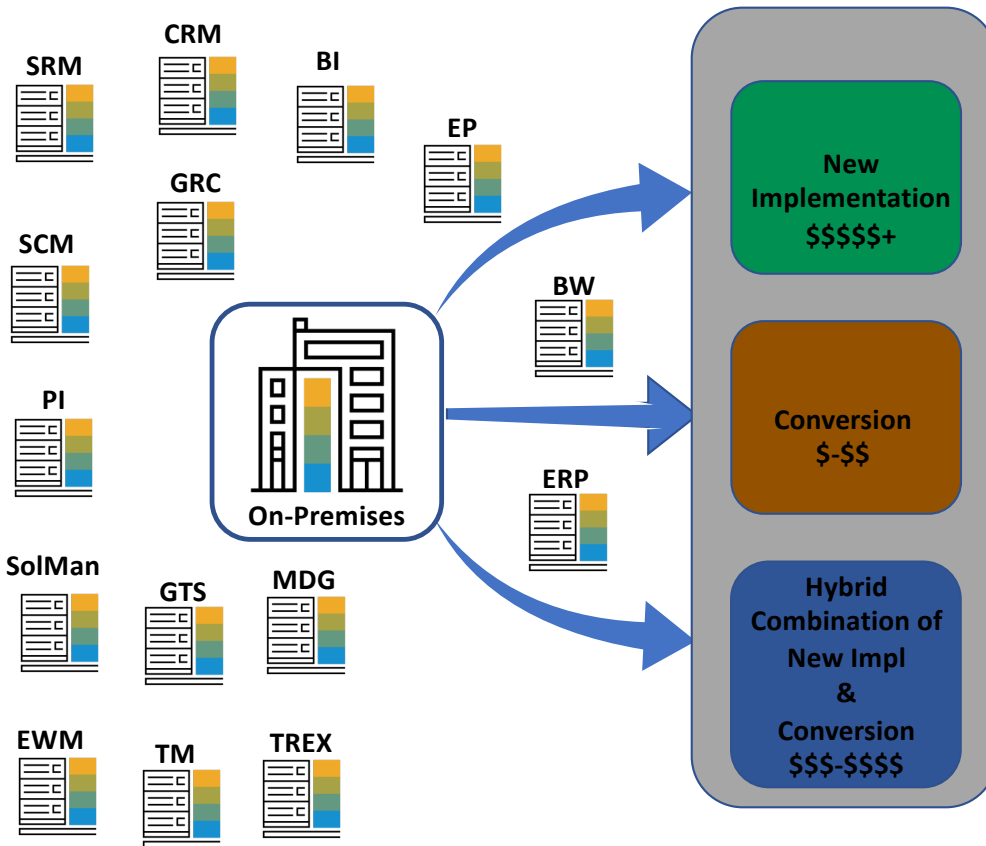
In the beginning ...



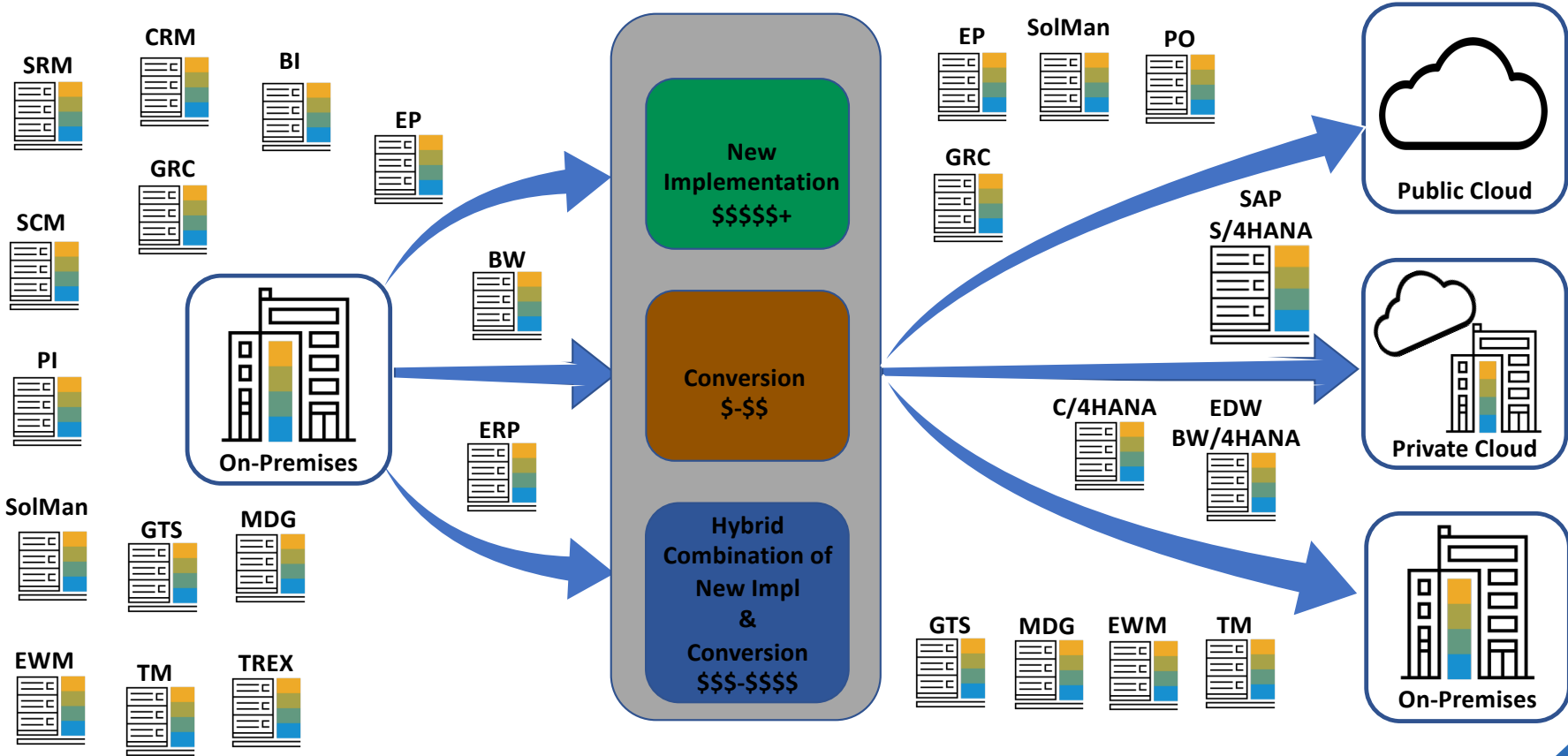
2027



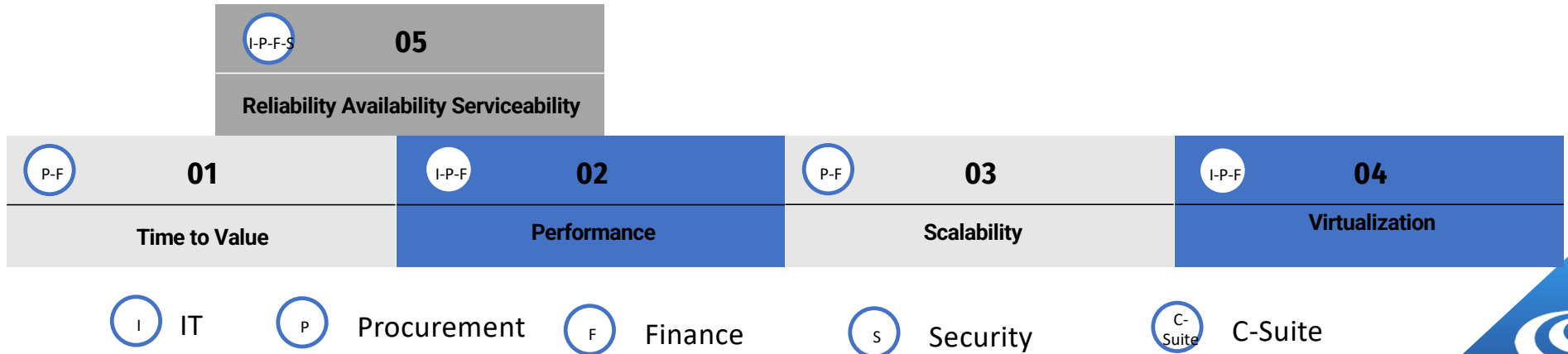
Decisions - Decisions



HANA Ready



Obtaining the Desirable End State



Not Created Equal

SAP HANA is an In-Memory DB



How memory RAS technologies can enhance the uptime of HPE ProLiant servers

Technical white paper

Summary

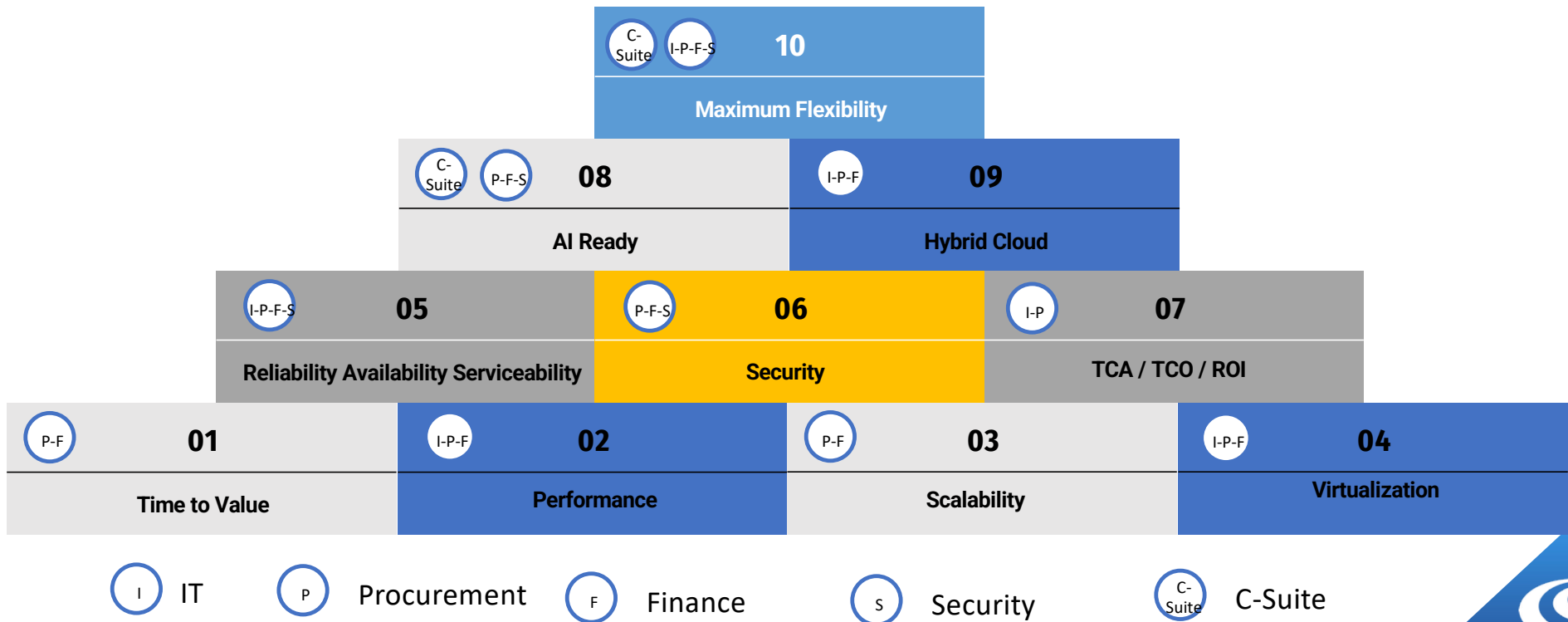
Memory RAS capabilities can reduce scale-up server crash rates by approximately 85%¹ and the annual service rate by 90%²

Memory device failures—if not corrected—can result in service events, or even server crashes. As modern servers implement ever larger memory arrays, the likelihood of a memory device failure increases, especially for scale-up³ servers due to their high memory capacity. To outpace this trend, HPE ProLiant servers provide an increasingly comprehensive suite of memory error detection and correction features—collectively called memory RAS (reliability, availability, serviceability).

It might surprise you to know that memory device failures are far and away the most frequent type of failure for scale-up servers. This paper reviews recent HPE engineering analyses which identify memory device failures as the #1 root cause of both crashes and service events for scale-up servers in which advanced memory protection technologies such as DDDC or SDDC with rank sparing, have not been implemented.



Obtaining the Desirable End State



IBM Power

Visit us: <https://www.ibm.com/it-infrastructure/power>
Watch "The Legacy and Future of IBM POWER with IBM POWER10"

SAP HANA EXCELLENCE



Best SAP Performance

2.7x ~8,000
SAPS/co

Per core performance of 8-socket E1080 two-tier SAP SD benchmark compared to best x86 8-socket HPE Superdome Flex



Largest Customers

45

IBM Cloud - PowerVS Private Cloud

of America's top 50 largest revenue generating companies are active Power customers



Most Reliable

>=99.9999%

Availability rating in ITIC survey of 1,200 corporations across 28 vertical markets



Scale SAP on Power

100GB



40TB

Largest certified Memory instance



SAP on Power

>4,500

SAP HANA on Power customers



Highly Secure

Default Encrypted Memory @ no additional cost
Trusted (Secure) Boot, Firewall & , EDR, MFA, SCAP
4X crypto engines supporting AES, SHA2, and SHA3

<0.013%

Security vulnerabilities in PowerVM hypervisor compared to VMware



SAP on Power

16 LPARs

Highest # of production virtual partitions



AI on Power

42%

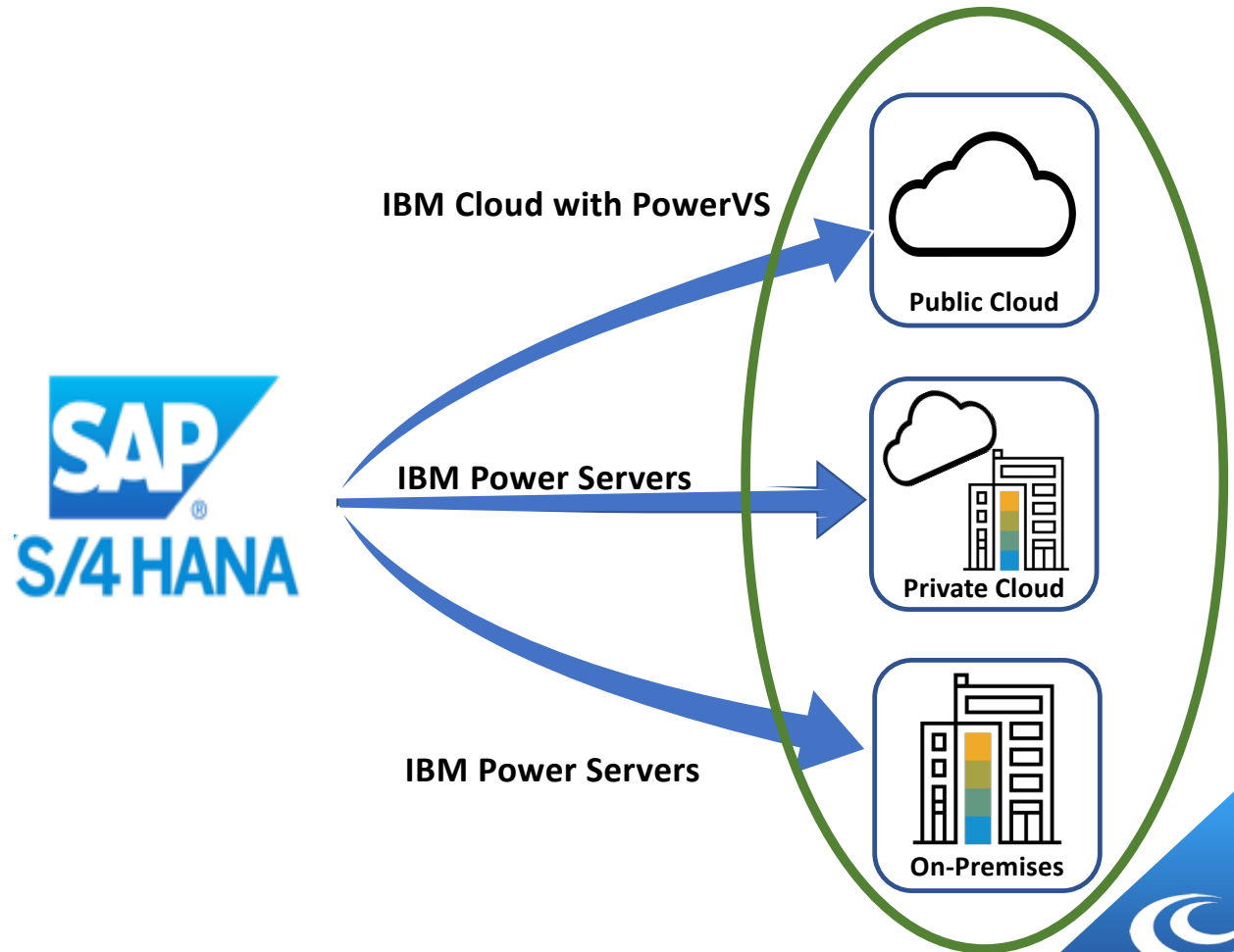
More inferencing throughput v x86

<1s

Inferencing latency

4 core 64GB to 240 core 64 TB Systems

Decision Time



Call to Action

Schedule a Meeting Today

\$0 SAP HANA Readiness Assessment

\$0 Cyber Security Assessment

\$0 Storage & Capacity Planning Assessment



Resources

Clear Technologies

<https://www.cleartechnologies.net/sap/>

ITIC Security Survey Results

<https://www.ibm.com/downloads/cas/BGARGJRZ>

ITIC Reliability Survey Results

<https://lnkd.in/dDbwVe77>

SAP Blog – SAP HANA on Power10

<https://blogs.sap.com/2023/03/17/sap-hana-on-ibm-power10/>

SAP Note 2100010

SAP HANA: Popular Misconceptions



Thank you

Q&A



13 Layers of SAP Security

Security Layers SAP product

Sub-competency 3rd Party product

IBM point of view of SAP Security

