



IT-Conductor™
> Cloud-based Application Management

SAP on Cloud End-to-End Migration and Automated IT Operations



@itconductor
@ozsoftcorp

ozsoft-consulting.com



Our Profile

- 25+ years of global SAP Technical solutions
- Cloud deployment, Certified Migration, Remote Management
- Lower TCO with OPEX vs CAPEX
- Focused end-to-end on:
 - **Automate** – IT operation processes, provisioning, DevOps
 - **Monitor** – Service discovery, Application Performance Management
 - **Manage** – migration, life-cycle, orchestrated operations
 - **Optimize** – Well-Architected Framework (Cost Optimization, Operations Excellence, Performance Efficiency, Reliability & Security)

"Linh/OZSoft has been an asset to us all along our SAP-Azure journey but today we hit a key milestone on the platform team that lays the foundation of Disaster Recovery readiness for not only cFin, but also ECC Migration systems. Linh's contributions are too numerous to mention over the year. This one exemplifies the selfless and comprehensive commitment, collaboration, and delivery for Chevron."

Rich Bernat – SAP Technical Services Lead at Chevron

SAP S/4HANA (Central Finance, Digital Core) on Microsoft Azure

"It has been a pleasure working with the OZSoft team. You guys have built a rocket ... this thing flies! You made this a success!"

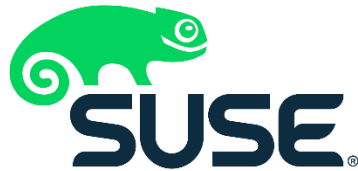
Jordi Conrado, VP of IT – ADP

SAP Parallel Upgrade & Migration of 16 TB ECC System on Oracle RAC

> About us

Est. 1996 by SAP Basis experts, HQ in Silicon Valley, CA. Delivering End-to-End SAP Technical Services and Enterprise IT Operations Automation Platform

High profile SAP customers and partners:



"Thanks to the IT-Conductor team for the great support and partnership on successful Zuellig Pharma SAP on HANA journey, migrating and managing the world's largest SAP HANA on public cloud infrastructure running on Microsoft Azure"

Siva Prasad - Account Director at T-Systems Singapore

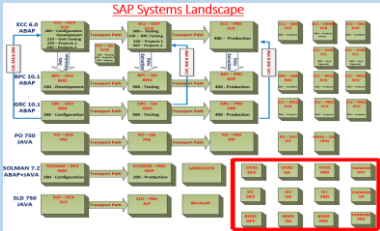
SAP Applications Migration and Monitoring on Microsoft Azure

> SAP to Cloud Migration Journey

Discover

- Monitor source environment

On-Prem



Distill

- Generate source environment performance and configuration baseline

Design

- Map to target best practices cloud architecture
- Design provisioning templates and migration approach

Develop

- Deployment plan
- Customize automation templates
- Technical validation plans

Deploy

- Provisioning
- Migration
- Lifecycle Management
- Operations automation

Storage Replication | DB Replication | Data Migration | VM Migration



SAP to Cloud Migration - Discover

Discover

- **IT-Conductor**
Patent-pending
platform for
Agent-less full
stack
monitoring and
automation
- **Collect**
performance
and
configuration
data over
analysis period
- **50% less time**
and efforts in
hours

S/4HANA On-Premise

 S/4HANA	ASE Servers	FES	 ZKPI_HOZ_MULTI_REPORT Execution Log KPI HOZ HANA Memory Overview NAME License memory limit Physical memory (available) Physical memory (used) Global allocation limit HANA instance memory (allocated) HANA instance memory (peak used) HANA instance memory (used) HANA shared memory HANA heap memory (used)
	Clusters	HOZ	
	HANA Systems	H81 S/4HANA 1809	
		HOZ S/4HANA 1809	
	Linux Systems	ozs8Thana	
		ozsapfes	
	SAP Host Agents	OZ1	
	SAP Systems	FES	
		OZ1	

 ZKPI_HOZ_MULTI_REPORT Execution Log

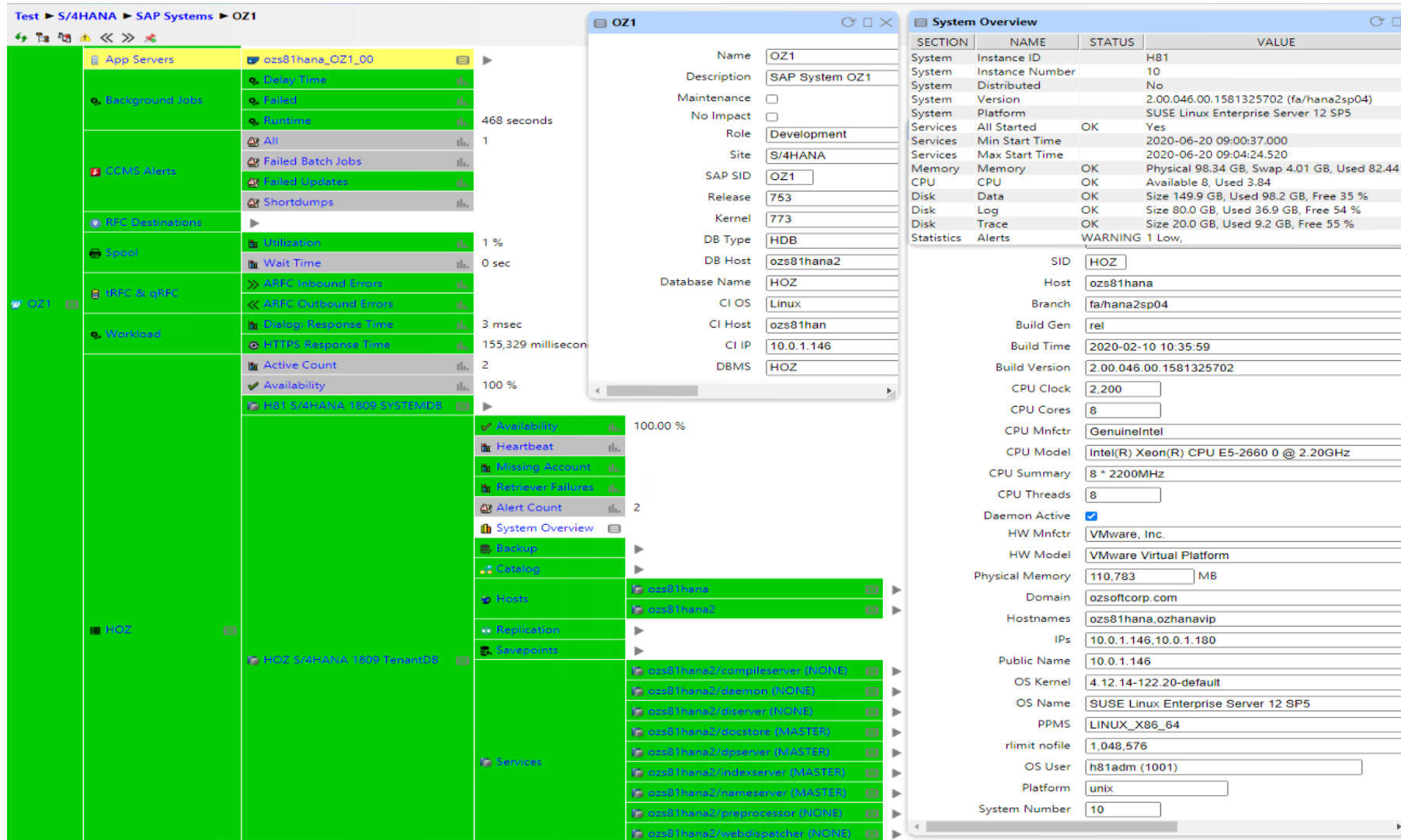
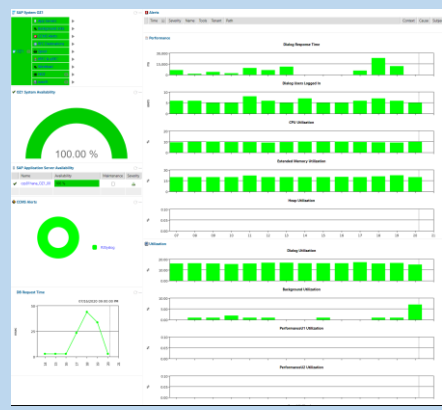
KPI	TIMESTAMP	
HOZ HANA Memory Overview		
2020-07-30 17:04:52.053000000		
NAME	TOTAL_GB	DETAIL_GB
License memory limit	256	
Physical memory (available)	98	98 (ozs81hana2)
Physical memory (used)	83	83 (ozs81hana2)
Global allocation limit	91	91 (ozs81hana2)
HANA instance memory (allocated)	91	91 (ozs81hana2)
HANA instance memory (peak used)	84	84 (ozs81hana)
		79 (ozs81hana2)
HANA instance memory (used)	73	73 (ozs81hana2)
HANA shared memory	5	5 (ozs81hana2)
HANA heap memory (used)	56	56 (ozs81hana2)
Column store size	19	19 (ozs81hana2)
Row store size	5	2 (ozs81hana2)
Disk size	85	85 (global)

KPI								
HOZ CPU AND MEMORY HISTORY								
SNAPSHOT_TIME	HOST	PHYS_TOTAL_GB	PHYS_USED_GB	PHYS_USED_PCT	ALLOC_LIM_GB	SWAP_FREE_GB	SWAP_USED_GB	CPU_BUSY
2020/07/30 17	ozs81hana2	98.34	82.48	83.87	90.90	4.01	0.00	22.29
2020/07/30 16	ozs81hana2	98.34	82.10	83.48	90.90	4.01	0.00	28.79
2020/07/30 15	ozs81hana2	98.34	81.93	83.31	90.90	4.01	0.00	28.93
2020/07/30 14	ozs81hana2	98.34	82.27	83.65	90.90	4.01	0.00	28.63
2020/07/30 13	ozs81hana2	98.34	82.16	83.55	90.90	4.01	0.00	29.05
2020/07/30 12	ozs81hana2	98.34	82.18	83.57	90.90	4.01	0.00	28.82
2020/07/30 11	ozs81hana2	98.34	82.33	83.71	90.90	4.01	0.00	27.77
2020/07/30 10	ozs81hana2	98.34	82.12	83.50	90.90	4.01	0.00	28.32

SAP to Cloud Migration - Distill

Distill

- **Generate source environment performance and configuration baseline**
- **Git repo for reporting templates**
- **Data driven approach**

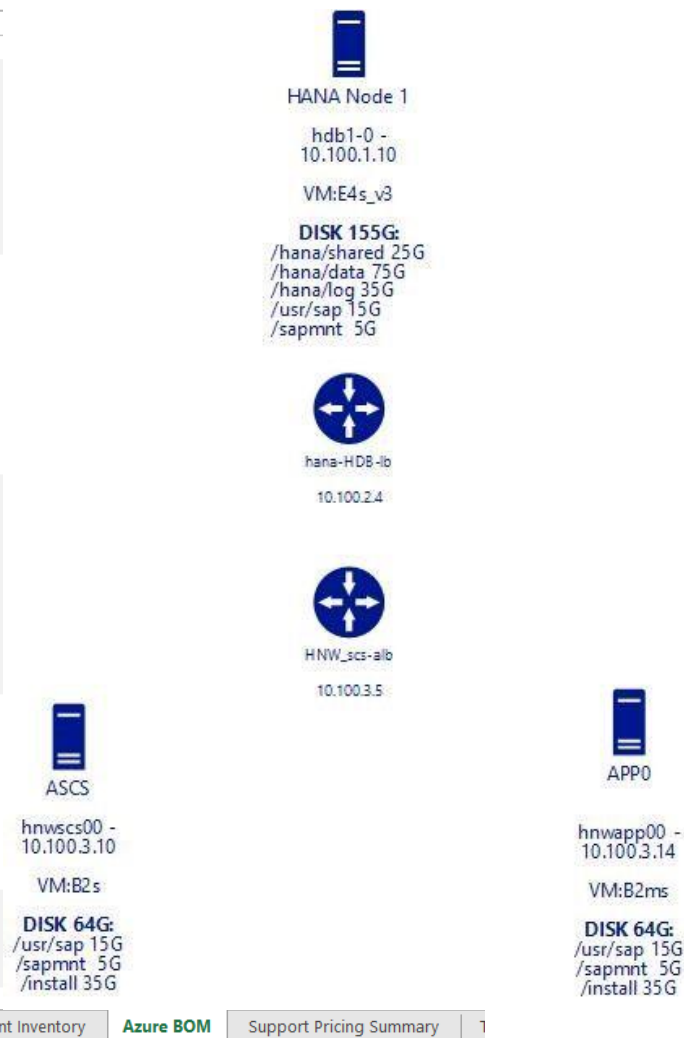


SAP to Cloud Migration - Design

Design

- Map to target best practices Well-architected Framework
- Design provisioning templates and migration approach
- Purpose built for SAP infrastructure
- Optimized for remote delivery to worldwide customers

Landscape		System Type	Environment	Type	VM Size	Quantity	Standard Option		
							PAYG (\$)	1YR RI (\$)	3 YR RI(\$)
ABC	ECC Prod	ECC 6	Production	Database	Standard_D8s_v3 (8 CPU, 32GB)	1	\$ 626.3	\$ 513.9	\$ 444.8
	ECC Prod	ECC 6	Production	Application Servers	Standard_D2s_v3 (2 CPU, 8 GB)	2	\$ 411.7	\$ 355.5	\$ 320.9
	ECC Prod	ECC 6	Production	Storage	3TB (3 X P30)	1	\$ 506.6	\$ 506.6	\$ 506.6
	ECC Non Prc	ECC 6	Non Production	Database	Standard_D2s_v3 (2 CPU, 8 GB)	3	\$ 617.6	\$ 533.3	\$ 481.4
	ECC Non Prc	ECC 6	Non Production	Storage	5 TB (5 X E30)	1	\$ 237.0	\$ 237.0	\$ 237.0
	ECC Prod	ECC 6	HA DR	Database	Standard_D8s_v3 (8 CPU, 32GB)	1	\$ 724.2	\$ 513.9	\$ 444.8
	ECC Prod	ECC 6	HA DR	Application Servers	Standard_D2s_v3 (2 CPU, 8 GB)	2	\$ 460.8	\$ 355.5	\$ 320.9
DEF	ECC Prod	ECC 6	HA DR	Storage	3TB (3 X P30)	1	\$ 506.6	\$ 506.6	\$ 506.6
	ECC Prod	ECC 6	Production	Database	Standard_E4s_v3(4 CPU, 32GB)	1	\$ 476.0	\$ 382.1	\$ 333.8
	ECC Prod	ECC 6	Production	Application Servers	Standard_D4s_v3 (4CPU, 16GB)	1	\$ 411.7	\$ 355.5	\$ 321.0
	ECC Prod	ECC 6	Production	Storage	1 TB (1 X P30)	1	\$ 179.6	\$ 179.6	\$ 179.6
	ECC Non Prc	ECC 6	Non Production	Database	Standard_E2s_v3 (2CPU, 16GB)	1	\$ 238.0	\$ 191.1	\$ 166.9
	ECC Non Prc	ECC 6	Non Production	Database	Standard_D2s_v3 (2 CPU, 8 GB)	2	\$ 411.7	\$ 355.5	\$ 320.9
	ECC Non Prc	ECC 6	Non Production	Storage	1.5 TB (1 E30 + 1 E20)	1	\$ 149.2	\$ 149.2	\$ 149.2
GHI	ECC Prod	ECC 6	HA DR	Database	Standard_E4s_v3(4 CPU, 32GB)	1	\$ 544.3	\$ 382.1	\$ 333.8
	ECC Prod	ECC 6	HA DR	Application Servers	Standard_D4s_v3 (4CPU, 16GB)	1	\$ 460.6	\$ 355.5	\$ 321.0
	ECC Prod	ECC 6	HA DR	Storage	1 TB (1 X P30)	1	\$ 179.6	\$ 179.6	\$ 179.6
	ECC Prod	ECC 6	Production	Database	Standard_E4s_v3(4 CPU, 32GB)	1	\$ 476.0	\$ 382.1	\$ 333.8
	ECC Prod	ECC 6	Production	Application Servers	Standard_D4s_v3 (4CPU, 16GB)	1	\$ 411.7	\$ 355.5	\$ 321.0
	ECC Prod	ECC 6	Production	Storage	400 GB (1 P20)	1	\$ 104.6	\$ 104.6	\$ 104.6
	ECC Non Prc	ECC 6	Non Production	Database	Standard_E2s_v3 (2CPU, 16GB)	1	\$ 238.0	\$ 191.1	\$ 166.9
JKL	ECC Non Prc	ECC 7	Non Production	Database	Standard_D2s_v3 (2 CPU, 8 GB)	2	\$ 411.7	\$ 355.5	\$ 320.9
	ECC Non Prc	ECC 8	Non Production	Storage	1 TB (1 E30)	1	\$ 83.4	\$ 83.4	\$ 83.4
	ECC Prod	ECC 6	HA DR	Database	Standard_E4s_v3(4 CPU, 32GB)	1	\$ 544.3	\$ 382.1	\$ 333.8
	ECC Prod	ECC 6	HA DR	Application Servers	Standard_D4s_v3 (4CPU, 16GB)	1	\$ 460.6	\$ 355.5	\$ 321.0
	ECC Prod	ECC 6	HA DR	Storage	400 GB (1 P20)	1	\$ 104.6	\$ 104.6	\$ 104.6
	ECC Prod	BW	Production	Database	Standard_E8s_v3(8 CPU, 64GB)	1	\$ 754.8	\$ 567.1	\$ 470.6
	ECC Prod	BW	Production	Application Servers	Standard_E2s_v3 (2CPU, 16GB)	1	\$ 238.0	\$ 191.1	\$ 166.9
MNO	ECC Prod	BW	Production	Storage	2 TB (2 X P30)	1	\$ 343.1	\$ 343.1	\$ 343.1
	ECC Non Prc	BW	Non Production	Database	Standard_DS12_v2 (4 CPU, 28 GB)	1	\$ 590.6	\$ 408.9	\$ 351.0
	ECC Non Prc	BW	Non Production	Storage	2 TB (2 X E30)	1	\$ 121.8	\$ 121.8	\$ 121.8
	ECC Prod	BW	HA DR	Database	Standard_E8s_v3(8 CPU, 64GB)	1	\$ 891.5	\$ 567.1	\$ 470.6
	ECC Prod	BW	HA DR	Application Servers	Standard_E2s_v3 (2CPU, 16GB)	1	\$ 272.1	\$ 191.1	\$ 166.9
	ECC Prod	BW	HA DR	Storage	2 TB (2 X P30)	1	\$ 343.1	\$ 343.1	\$ 343.1
	ECC Prod	BW	HA DR	Storage	2 TB (2 X P30)	1	\$ 343.1	\$ 343.1	\$ 343.1
PQ1	GRC Prod	GRC	Production	Database	Standard_D2s_v3 (2 CPU, 8 GB)	1	\$ 205.9	\$ 177.8	\$ 160.5
	GRC Prod	GRC	Production	Storage	300 GB (1 P20)	1	\$ 104.6	\$ 104.6	\$ 104.6
	GRC Non Pri	GRC	Non Production	Database	Standard_D2s_v3 (2 CPU, 8 GB)	1	\$ 205.9	\$ 177.8	\$ 160.5
	GRC Non Pri	GRC	Non Production	Storage	300 GB (1 E20)	1	\$ 65.8	\$ 65.8	\$ 65.8
PJ1	GRC Prod	Ent Portal	Production	Database	Standard_D2s_v3 (2 CPU, 8 GB)	1	\$ 205.9	\$ 177.8	\$ 160.5



> SAP to Cloud Migration - Develop

Develop

- Deployment plan – phase approach based on priority and complexity
- Customize automation templates – Infrastructure as Code
- Technical validation plans

Migrate and Modernize

- Rehost
- Refactor
- Rearchitect
- Rebuild

IT-Conductor / automation-ansible Private

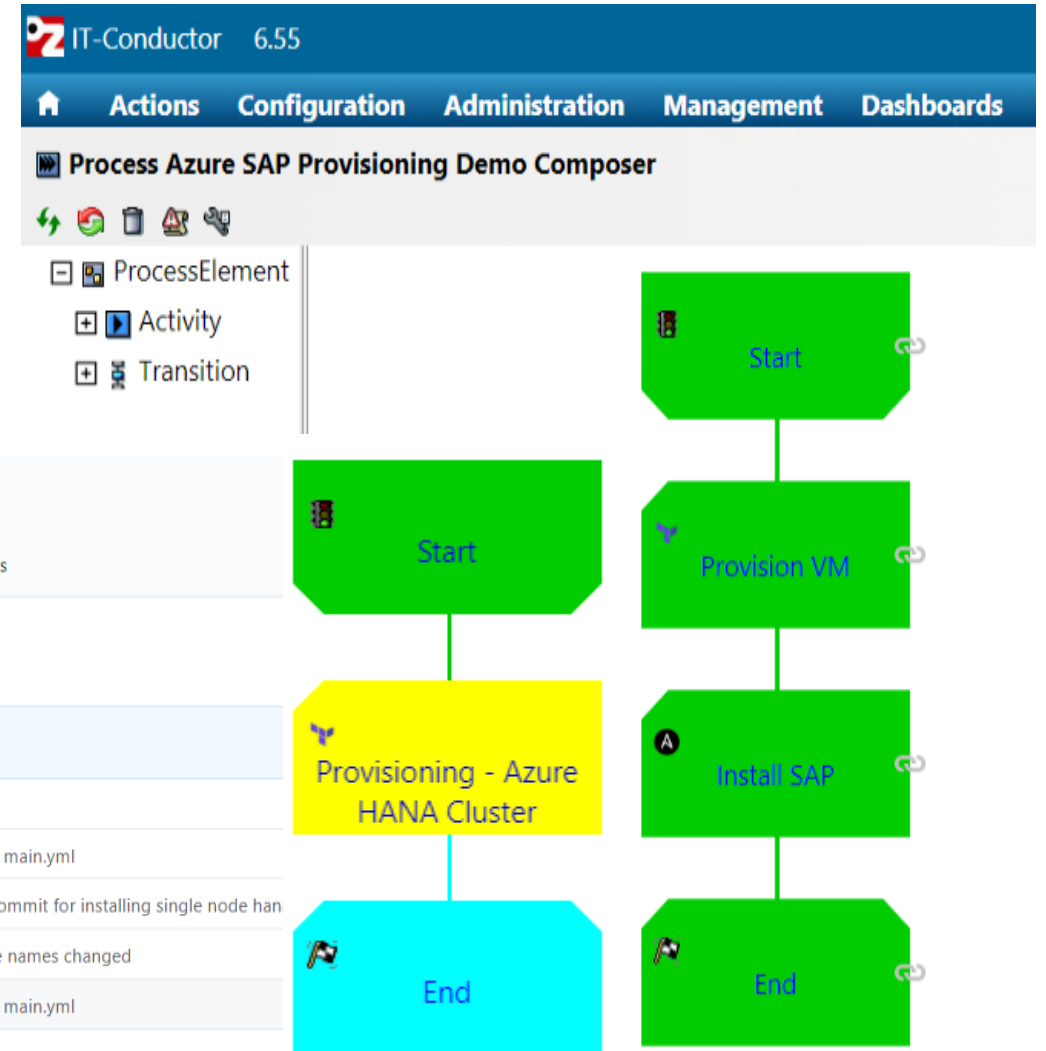
<> Code ⓘ Issues 🔗 Pull requests ▶ Actions 📁 Projects ⓘ Security 📈 Insights

master automation-ansible / sap-hana / roles /

itcdineshamatya Update main.yml ...

..

disk-setup	Update main.yml
hotfix	initial commit for installing single node han
netweaver-install	variable names changed
saphana-install	Update main.yml



> SAP to Cloud Migration - Deploy

Deploy

- Provisioning - DevOps
- Migration
- Testing
- Lifecycle Management
- Operations automation
- Continuous Optimization of Workload based on performance data

Migrate & Rehost															
Wk-1	Wk-2	Wk-3	Wk-4	Wk-5	Wk-6	Wk-7	Wk-8	Wk-9	Wk-10	Wk-11	Wk-12	Wk-13	Wk-14	Wk-15	Wk-n

DEV, POC AND SBX Environment

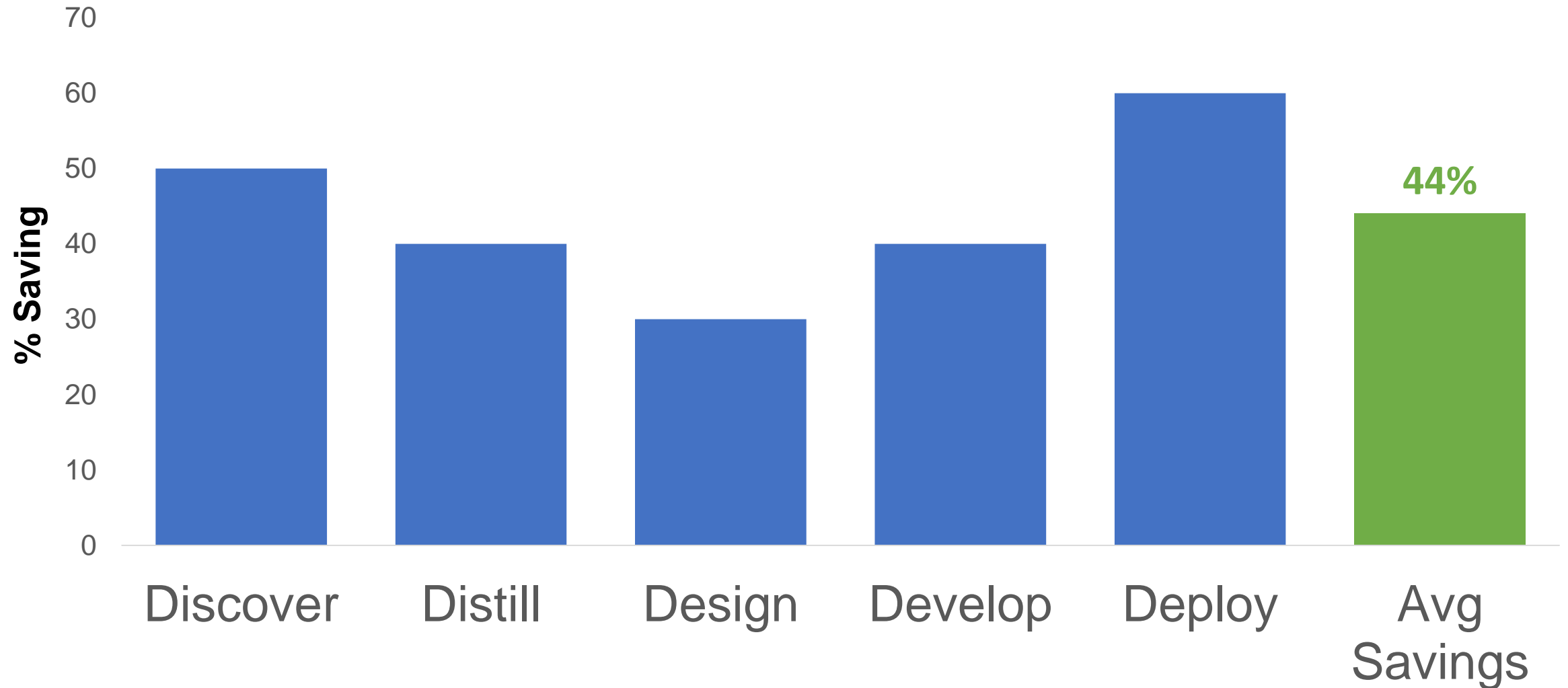
QA and TEST Environment

PROD Environment

The screenshot displays a deployment interface for SAP Cloud Migration. It features a list of virtual machines (VMs) with their respective statuses and configurations. A red circle highlights the 'SAPNWABAP75-Lin2' VM, which is currently in a 'Stopped' state. A red arrow points to the 'Virtual Machine' context menu, which is open, showing options like 'Modify', 'Copy', 'View', 'Delete', 'Stop', 'Deallocate', 'Commands', 'Service Explorer', 'Alerts', 'Maintenance On', and 'Subscriptions'. The 'Stop' option is highlighted with a red box. The interface also shows a table of VMs with columns for 'Availability', 'Retrievers Quality', 'Gateway Heartbeat', and 'SAPNWABAP75-Lin2'. The 'SAPNWABAP75-Lin2' VM is circled in red. The 'SAPNWABAP75-SAP1' VM is also visible. The interface includes a sidebar with 'Azure Tenants' and 'ITC' sections. The bottom right corner of the screenshot shows the text 'Copyright © 2018, IT-Conductor Inc.'

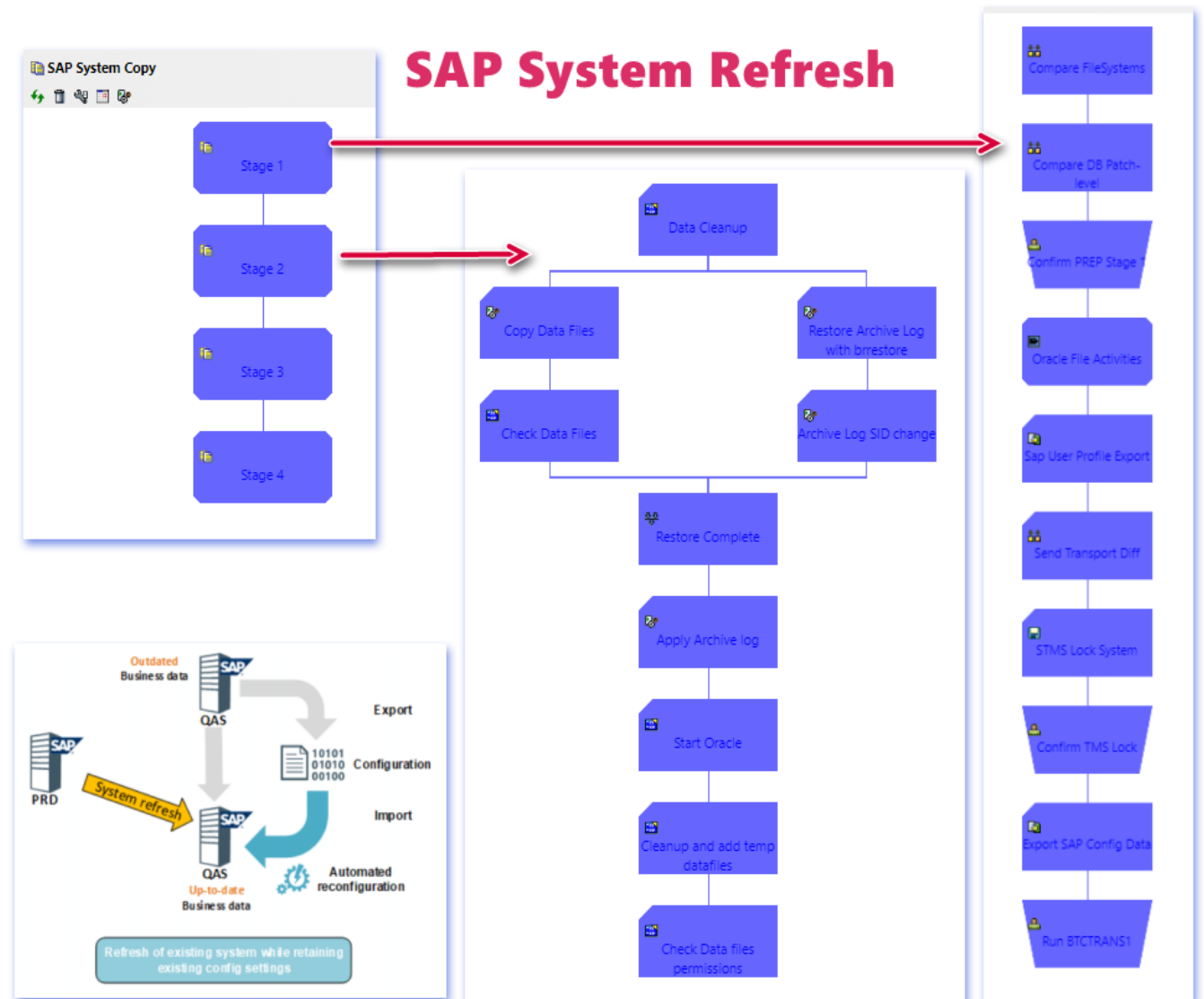
Copyright © 2018, IT-Conductor Inc.

➤ Time Savings with OZSOFT Expertise and IT-Conductor Automation



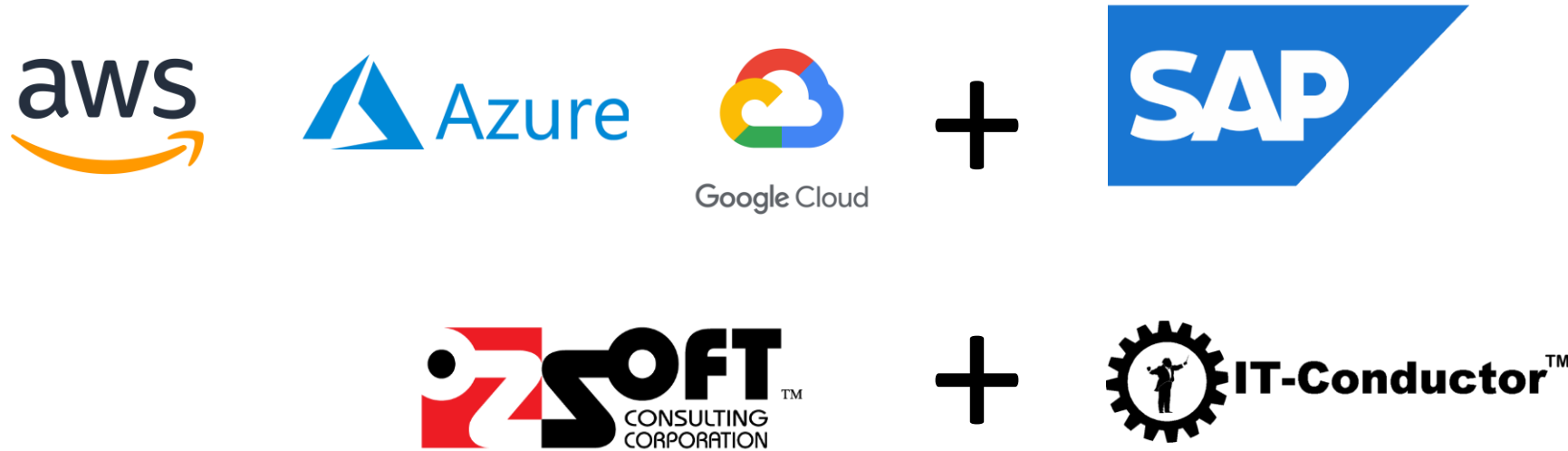
➤ Key Differentiator for End-to-End IT Enterprise Automation

- Infrastructure as Code Automation
- Migration Assessment (Baseline & Profiling)
- Routine IT Operation Process Automation
- Automate Root-cause Analysis
- Proactive Performance Management & ITSM Integration
- Global Trusted Advisor Network



Delivering Unique Capabilities for SAP on Cloud that other Competitors Wished they Have

- Agentless platform works with any customer environment in minutes
- Accelerate remote delivery globally, agile framework, highly scalable
- 24x7 continuous access to data to validate sizing, utilization and configuration throughout PoC and migration effort, leads to more accurate and efficient target environment
- Engage customers in any steps along their cloud journey starting with remote management of their on-prem environment. Leads to future opportunity pipeline even for customers not yet ready to migrate.
- Performance validation assurance as a service
- Automate Intelligently with integration into open standards such as Git, Terraform, Ansible, Azure API, REST API, JSON, native application protocols
- IT process orchestration can tackle highly complex tasks like system refresh and long running migrations.



Leverage IT-Conductor automation and ensure client success by aligning with SAP, Cloud, and OZSOFT

User Friendly

Lower Cost of Operation

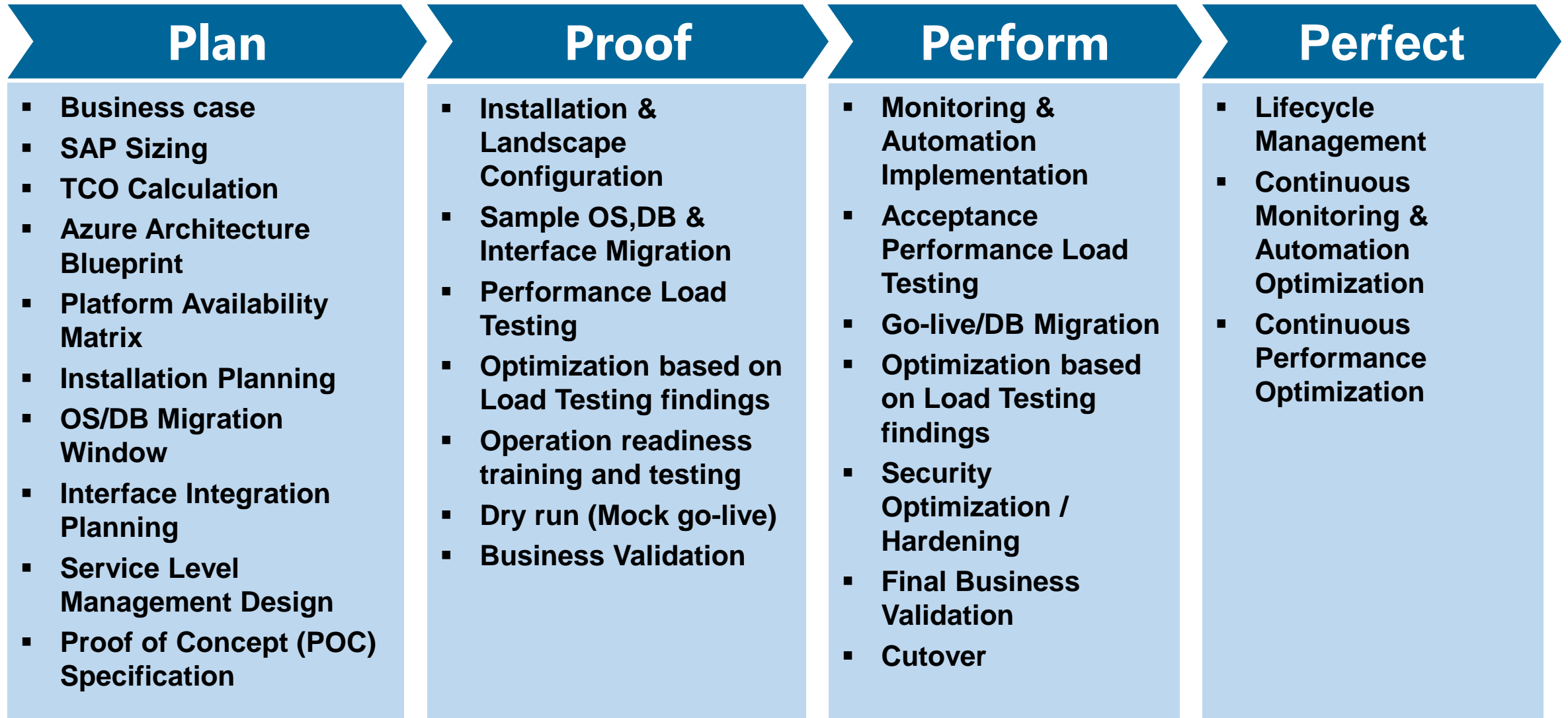
Fully Configurable

Low Risk Implementation

Environment Versatility

Accelerate with Automation

➤ SAP Basis Experts in Operations and Automation



SAP on Cloud Customer Successes

- **ServiceNow**

- Environment ECC, HANA, BPC, GRC, Solman, BOBJ/DataServices, PO
- Azure Site Recovery (ASR)
- Replication Migration

- **Chevron**

- S/4HANA Brownfield 30 systems with S/4, MDG, SLT, SAP DS, Smart Data Integration
- Legacy SAP migration 70 systems
- Infrastructure as Code automation with Ansible
- Azure Netapp Filesystem (ANF) for Oracle and HANA, snapshot backups
- HA with Pacemaker Clustering on RHEL
- DR with ASR and Replication
- BYOK Encryption with Thales VTE and SAP Data Custodian

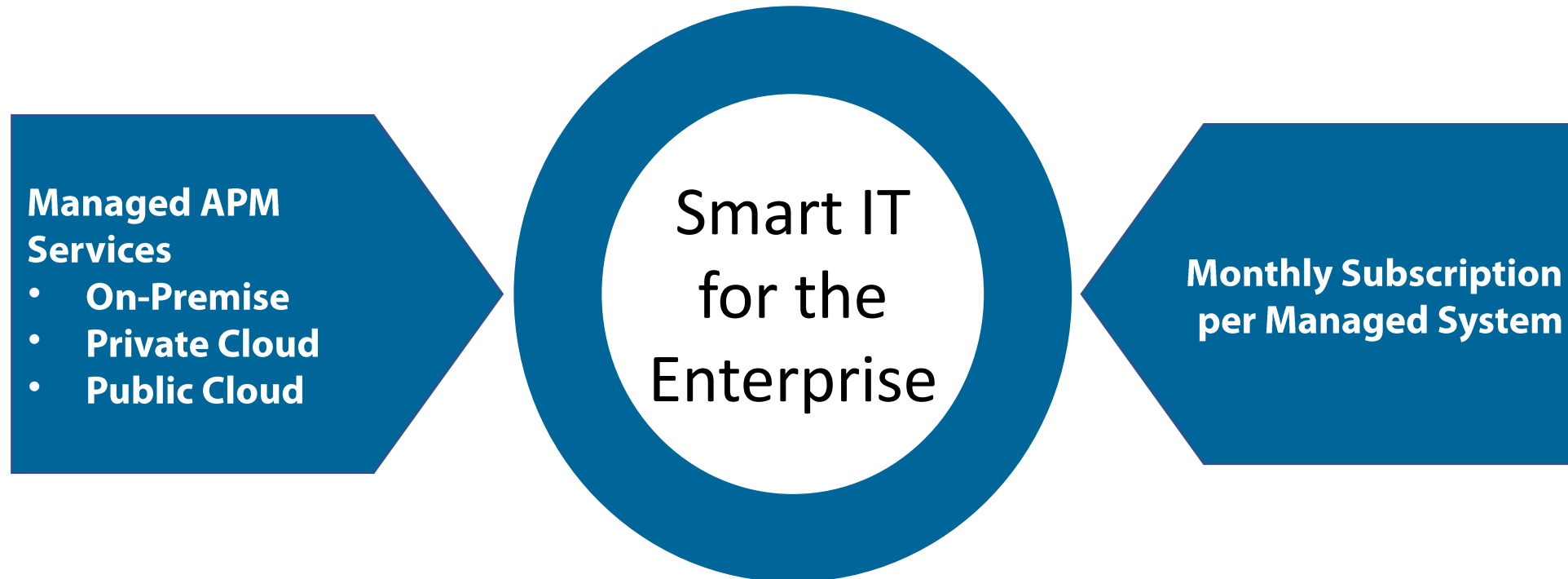
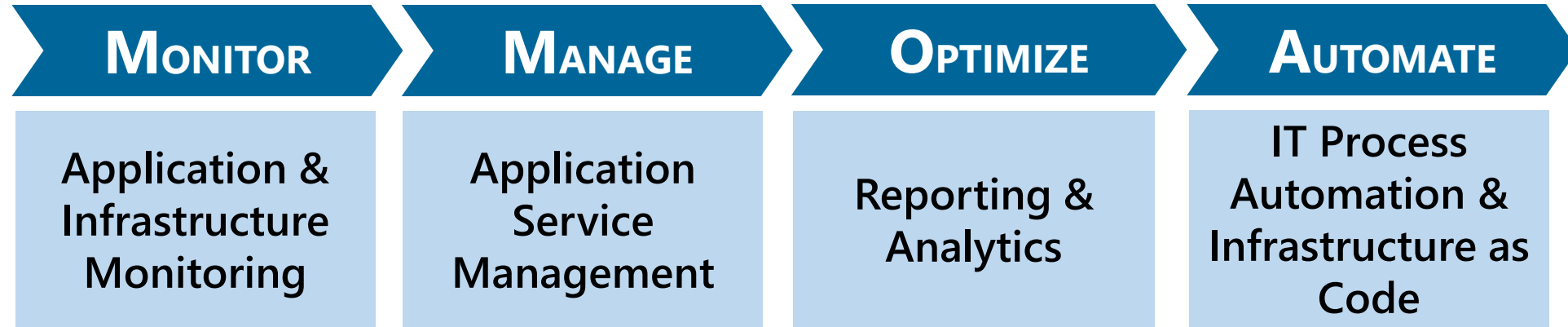
- **T-Systems / ZuelligPharma**

- On-prem 40 systems migration of SAP on DB2/Linux to HANA/Linux SLES
- Application Performance Management

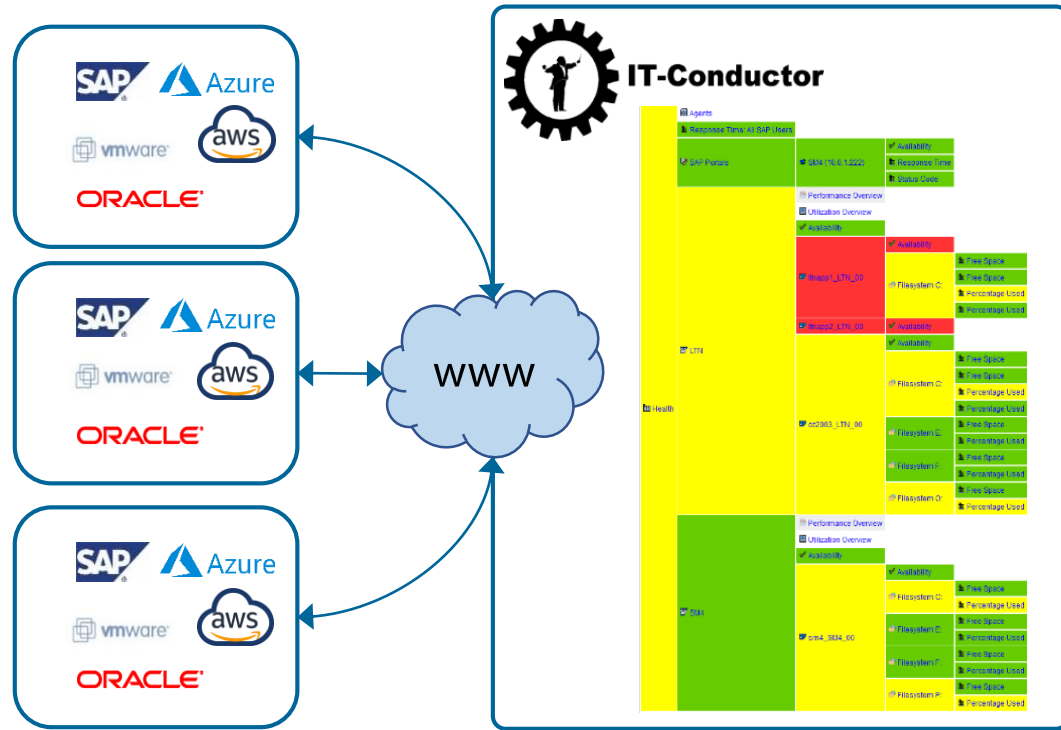
- **Brillio / Coats**

- SAP on HANA complete migration, optimization and life cycle management

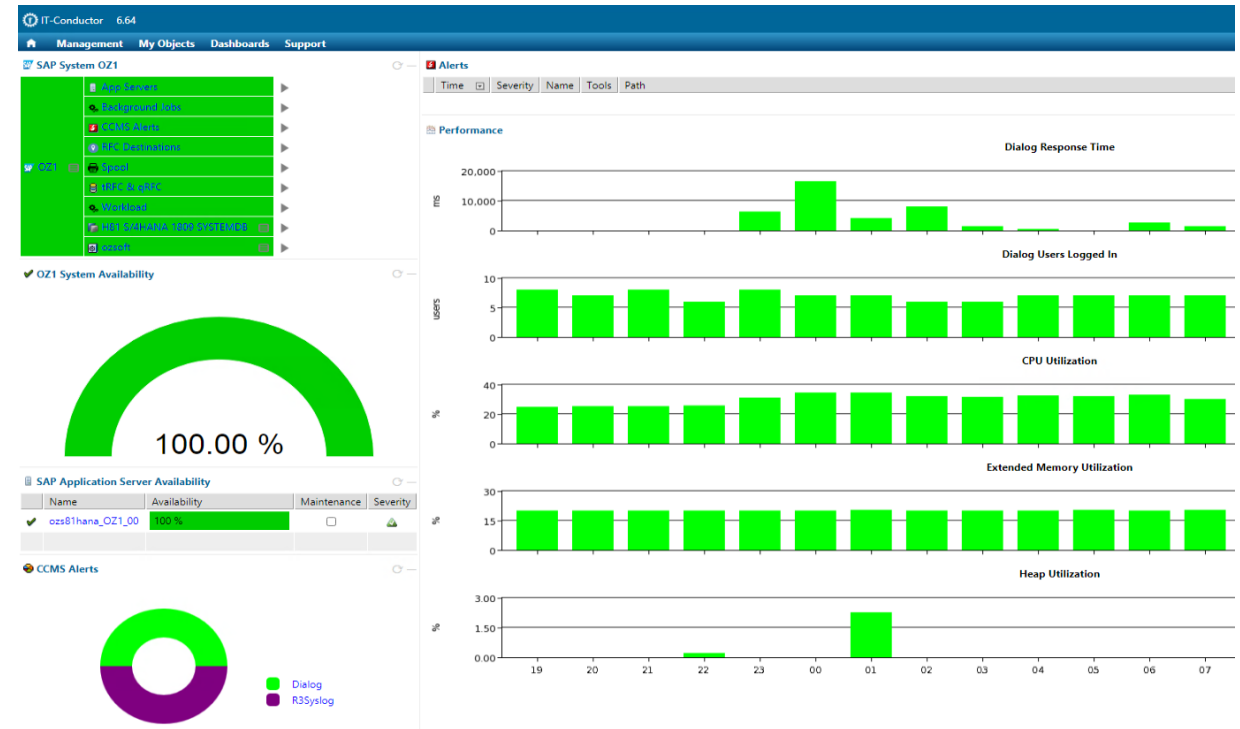
> Automated IT Service Management



➤ SaaS Platform to Reduce TCO by up to 70%



- Enterprise Grade Service Delivery
- End-User Experience Monitoring
- App & Infrastructure Monitoring
- Impact Analysis



- Root Cause Analysis
- Notification
- Automation
- Provisioning

> The Executive Team



Linh Nguyen: Co-Founder IT-Conductor, CEO

- Royal Melbourne Institute of Technology (RMIT) – Double degree in Computer Engineering & Computer Science
- 25+ years of international IT consulting experience
- Founder of OZSoft Consulting in 1996, specializing in SAP Performance & Automation software and consulting



David Staviski: Co-Founder IT-Conductor, President/CTO

- 30+ years in computer software and solutions development specializing in Enterprise Systems and IT Service Management, and Software Architecture design
- Held R&D management and Architect positions at leading Systems Management Vendors such as BMC and Quest
- Long track record of successful product delivery and innovation at various companies

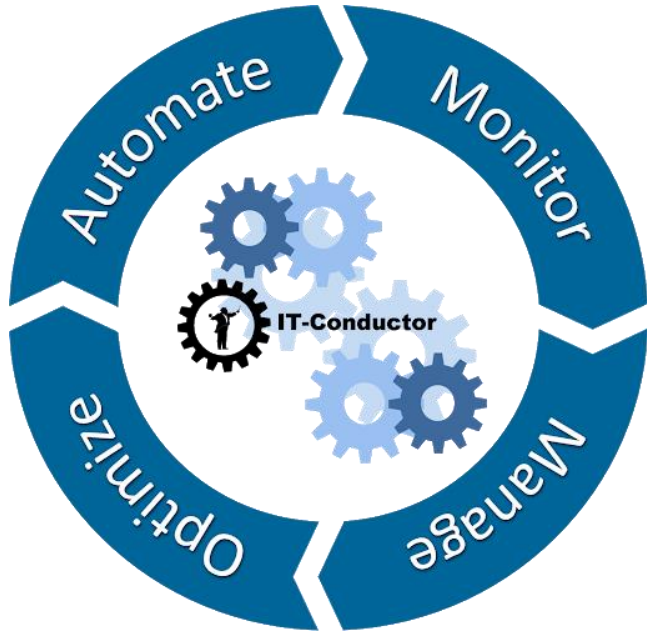
We're experienced leaders:

- 28+ years of SAP and Systems Management Expertise
- Global track record of innovation of software and services

Customer Success

Customer	Value
ADP	Very large scale SAP ECC Basis Upgrade & Migration
AMGEN	Large scale SAP ECC & BW Upgrade & Migration
IBM	Partner in delivering years of Turnkey SAP Migrations for IBM customers
MEDTRONIC	SAP Availability & Performance Management
CHEVRON	SAP on Azure S/4HANA Digital Core Architecture and Deployment. HA/DR. BYOK Encryption. Compliance.
T-SYSTEMS	SAP on Azure Cloud Migration, Monitoring and Application Performance Management

* Reference checks are welcome but need to be coordinated through Linh Nguyen



Automated for

itconductor.com
ozsoft-consulting.com



Linh Nguyen

linh.nguyen@itconductor.com

(408) 982-7797

David Staviski

david.staviski@itconductor.com

(949) 639-9416