



Cloud Migration and Modernization in the Public Sector

Aug 19



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A Webinar on **Cloud Migration & Modernization** in the **Public Sector**

Aug 19 | 8:00 AM PDT

Will start in a few minutes



Shafi Syed
CTO, Corent



Neil Kronimus
Sr. Director Cloud, GDIT



Ricardo Palhano
Sr. Solutions Architect, AWS

In this Webinar, we will cover



- **AWS**
 - Addressing Government Security requirements
 - Migration
 - Optimization

- **Corent**
 - The Cloud Journey
 - Assessment and Migration
 - Modernization planning and execution

- **GDIT**
 - Challenges in the public sector
 - Solutions

- **Q&A**

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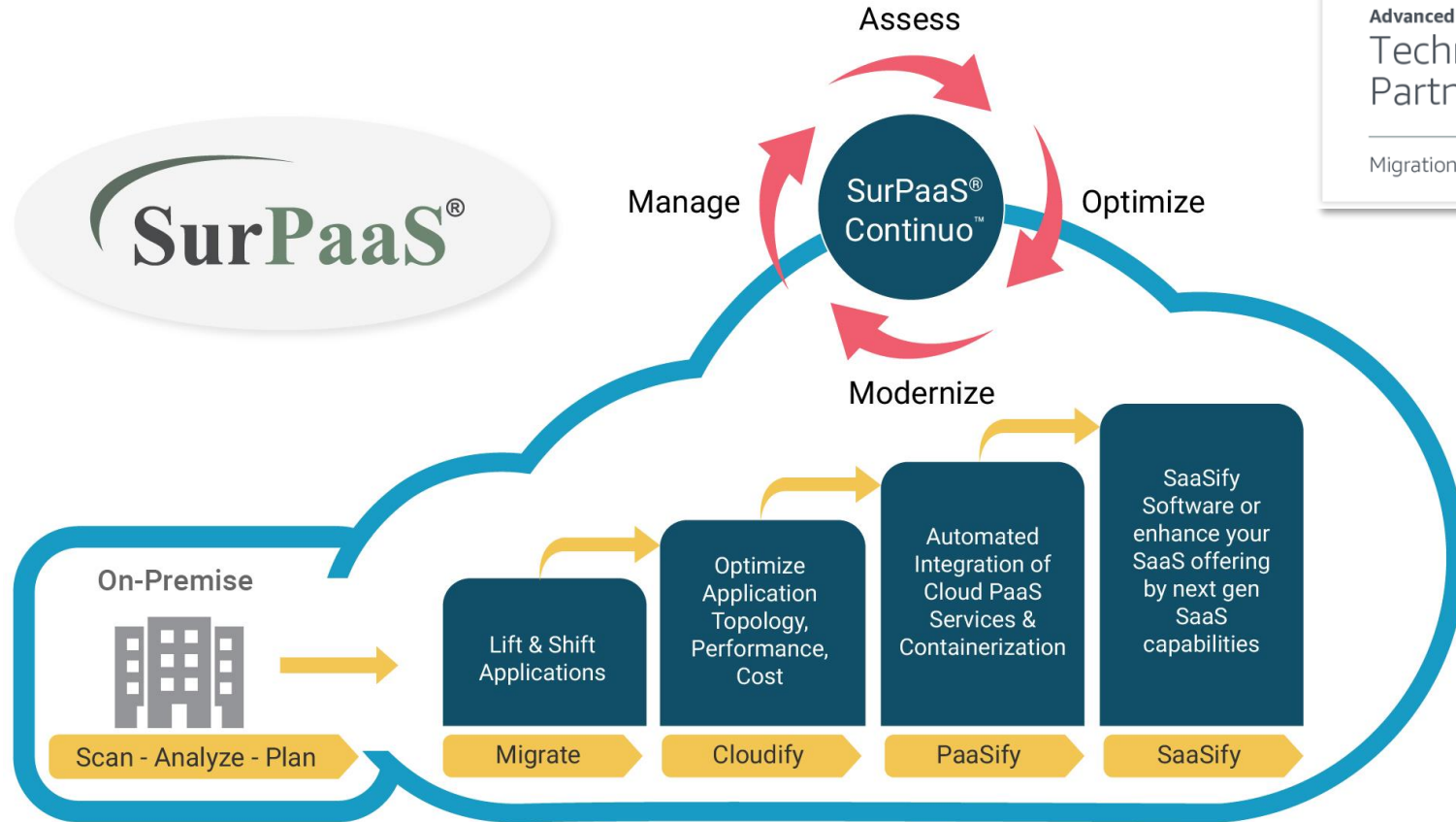
9:00 AM

Corent SurPaaS® Manages the entire the Cloud Journey

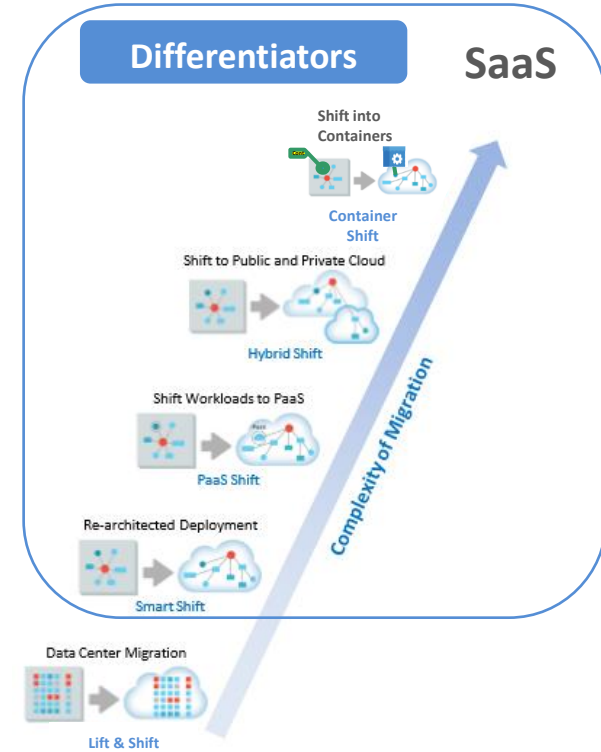
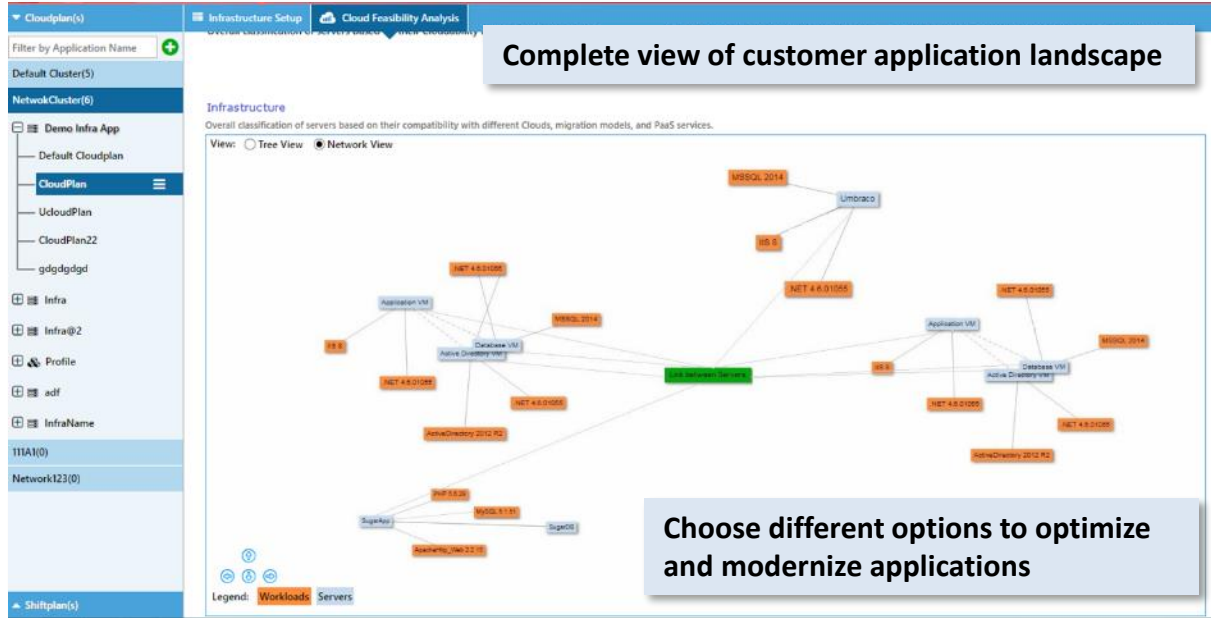


Advanced
Technology
Partner

Migration Competency



Decision driven options for customers to move up the chain



On-Prem

5 Scan methods in SurPaaS®

Fast Scan

For Lift & Shift

Scans 100s of servers in an hour

Optimal data gathering

Detailed Scan Agentless

For Lift & Shift/Smart migration

15-30 min* per VM/Server

Comprehensive reports with
Dependency mapping

Extended Scan Agentless

Can run for specified days/hours

Perf data gathered over time

Accurate sizing

Deep Scan Agent

For Smart migration

Additional workload specific data

Re-platforming and Hybrid
migration

Import From Other Tools

Import through templates or connectors

From Asset and Inventory discovery tools

Lansweeper, Movere, etc.


3 Secure Scenarios for Datacenter Assessment



Software Penetration Tested

Security Guidelines Documents


Secure SaaS



SurPaaS accessed as SaaS, connected to Vanguard

Direct data ingestion


Isolated



SurPaaS accessed as SaaS, isolated from Vanguard

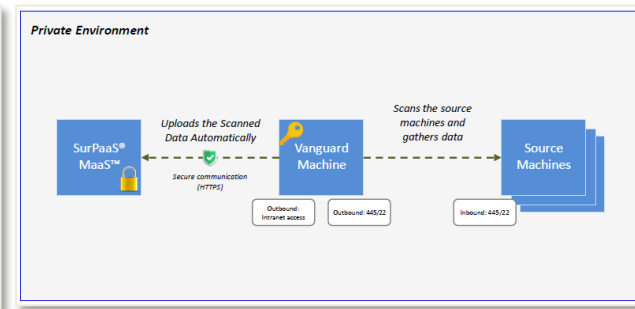
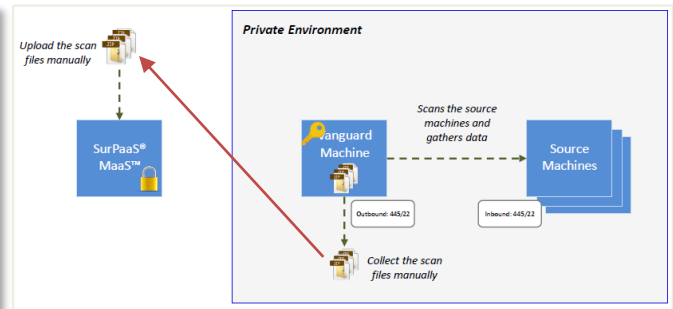
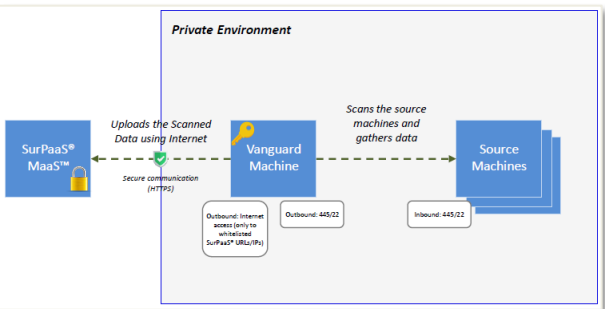
Data uploaded on demand

Embedded

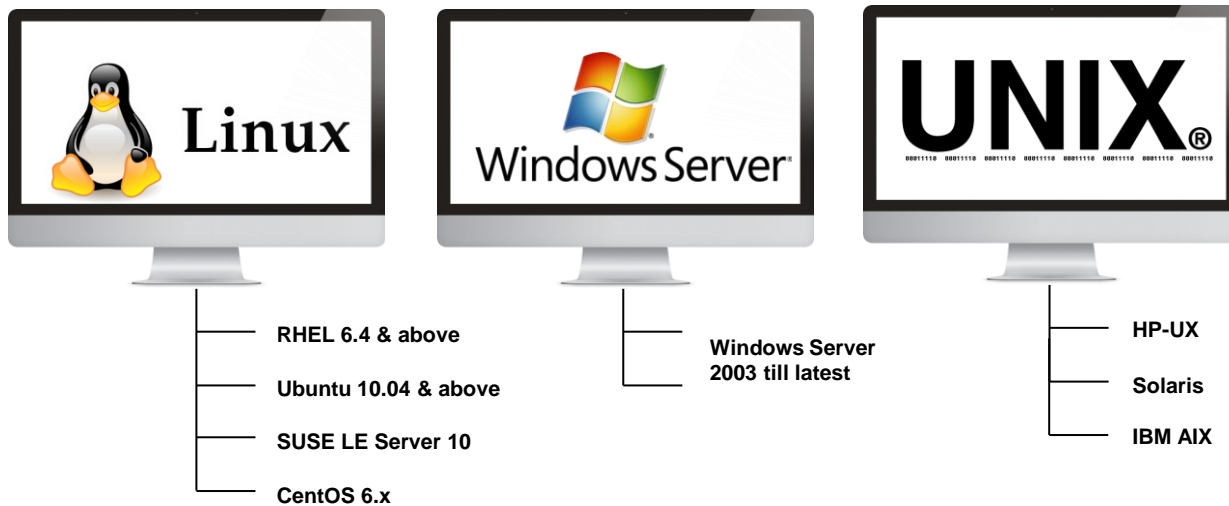


Embedded installation of SurPaaS and Vanguard

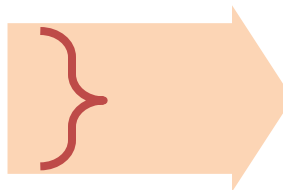
Data secured within Datacenter



Platforms for Assessment and Migration



- ❑ VMware and Hypervisor
- ❑ Baremetal
- ❑ Other Clouds



**AWS, Azure, Azure Stack,
IBM Cloud, Oracle OCI**

An innovative approach for Datacenter Assessment

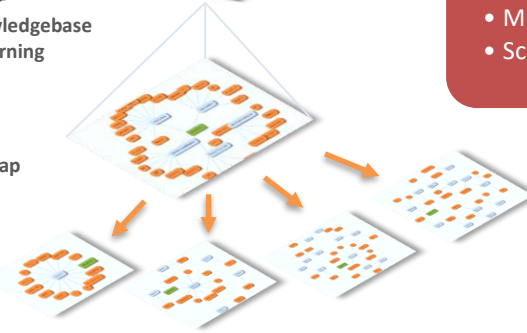


Workload Knowledgebase
for adaptive learning



Workload
connectivity map

What-If
Scenario
analysis



Scanning

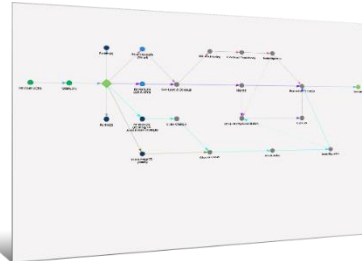
- Agentless Discovery and Pre-flight checks
- Multilevel parallel scans
- Scans any Server, Hypervisor or VM

Assessment

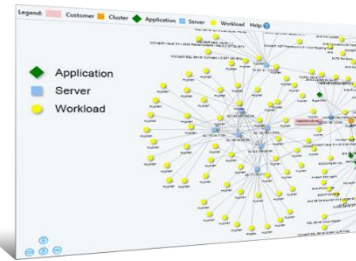
- Best practices & PaaS advisory
- Objective based Sizing & cost modelling
- Multiple What-If scenario analysis, move group analysis and R'lane (6R) charts



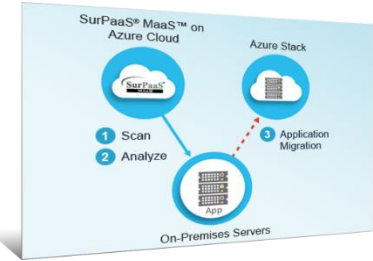
TCO & Rightsizing



Migration R'lane Strategy

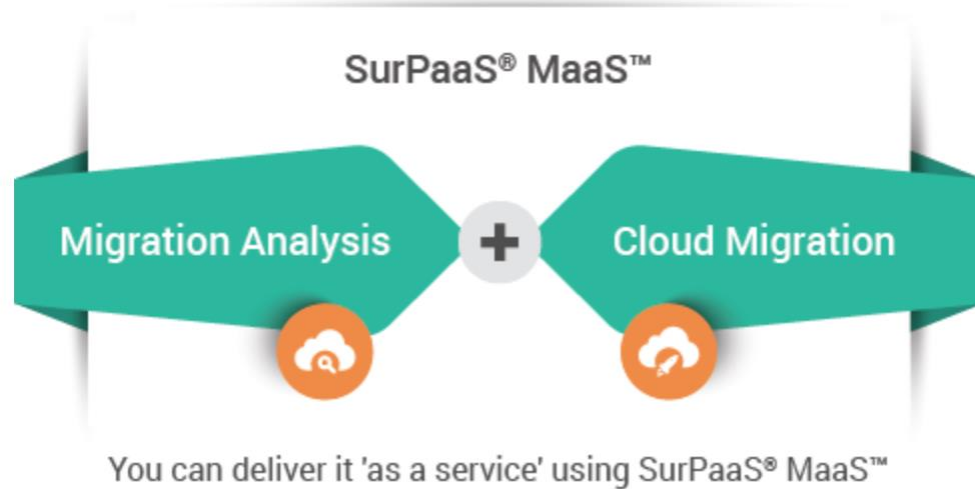


Connectivity map

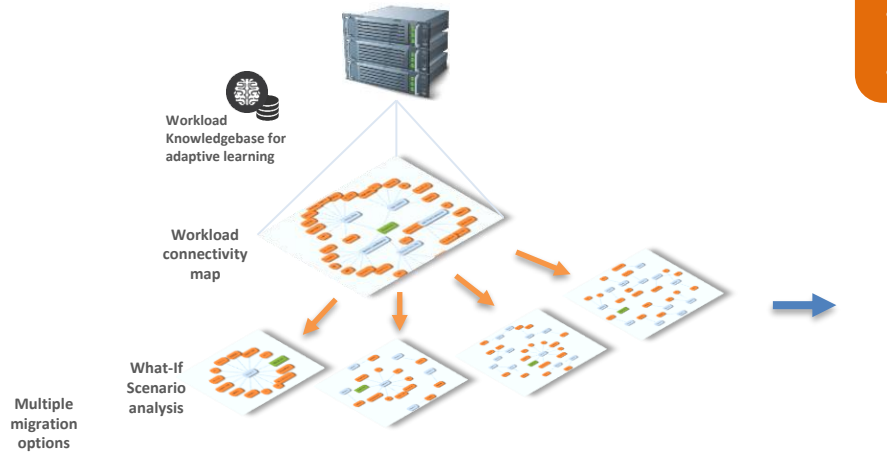


Hybrid Cloud migration

Unique integrated Assessment and Migration



Integrated multiple Migration options



Migration

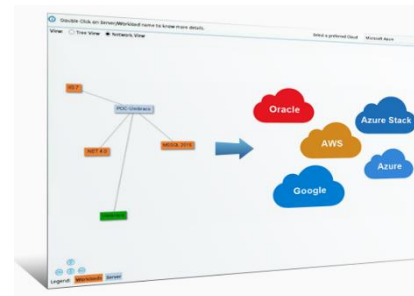
- Multilevel Parallel Lift & Shift
- Smart, PaaS & Hybrid Shift to Azure/Azure Stack
- Integration of Microsoft ASR/DMS

Post Migration

- Application Config Automation
- Zero point sync till Switchover
- Source Server auto shutdown



Advanced migration strategies



Multi Cloud migration

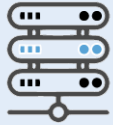


Container migration

Leveraging the different layers on Cloud

IaaS

Base infrastructure



Compute



Network



Storage

PaaS

Tools and platforms



Services

Containers and
Serverless Computing

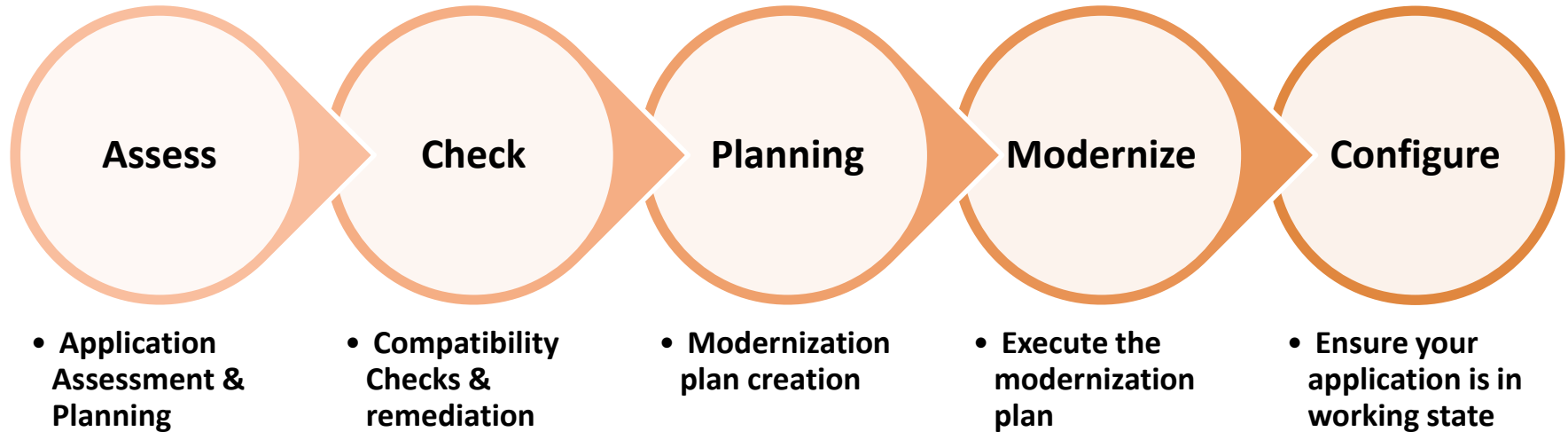


SaaS

Software delivered
as Service



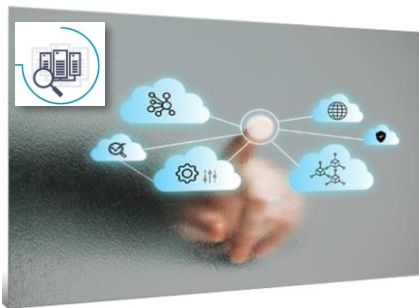
Process of Modernization



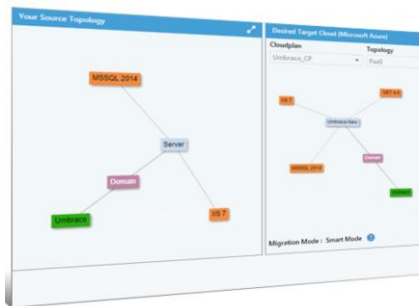
Scanning and Assessing your Application

- ❑ Multiple methods to scan
 - Quick scan, Agentless, Extended, Deep scanning...
- ❑ Assess workloads that match Modernization criteria
- ❑ Deeper scan and analysis to check feasibility and compatibility

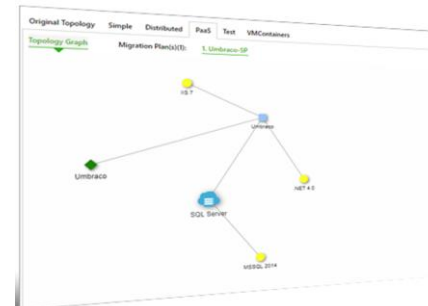
Application Modernization choices in SurPaaS (PaaS/Containers)



Scan and Assess for Modernization

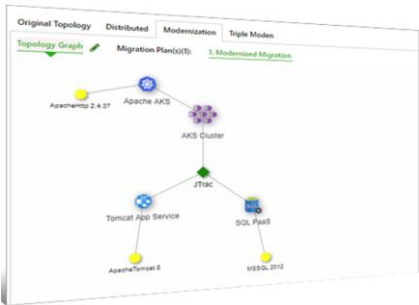


Re-platforming to redeploy workloads

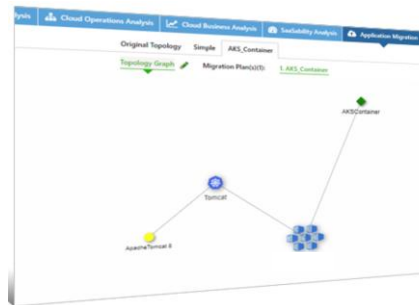


DB PaaS Service mapping and Migration

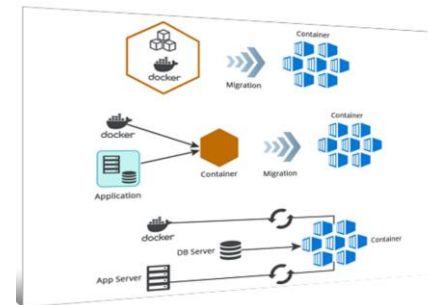
- Where do I look for PaaS and Container candidates in my application?
- How do I modernize?



Serverless Application Services mapping and Migration

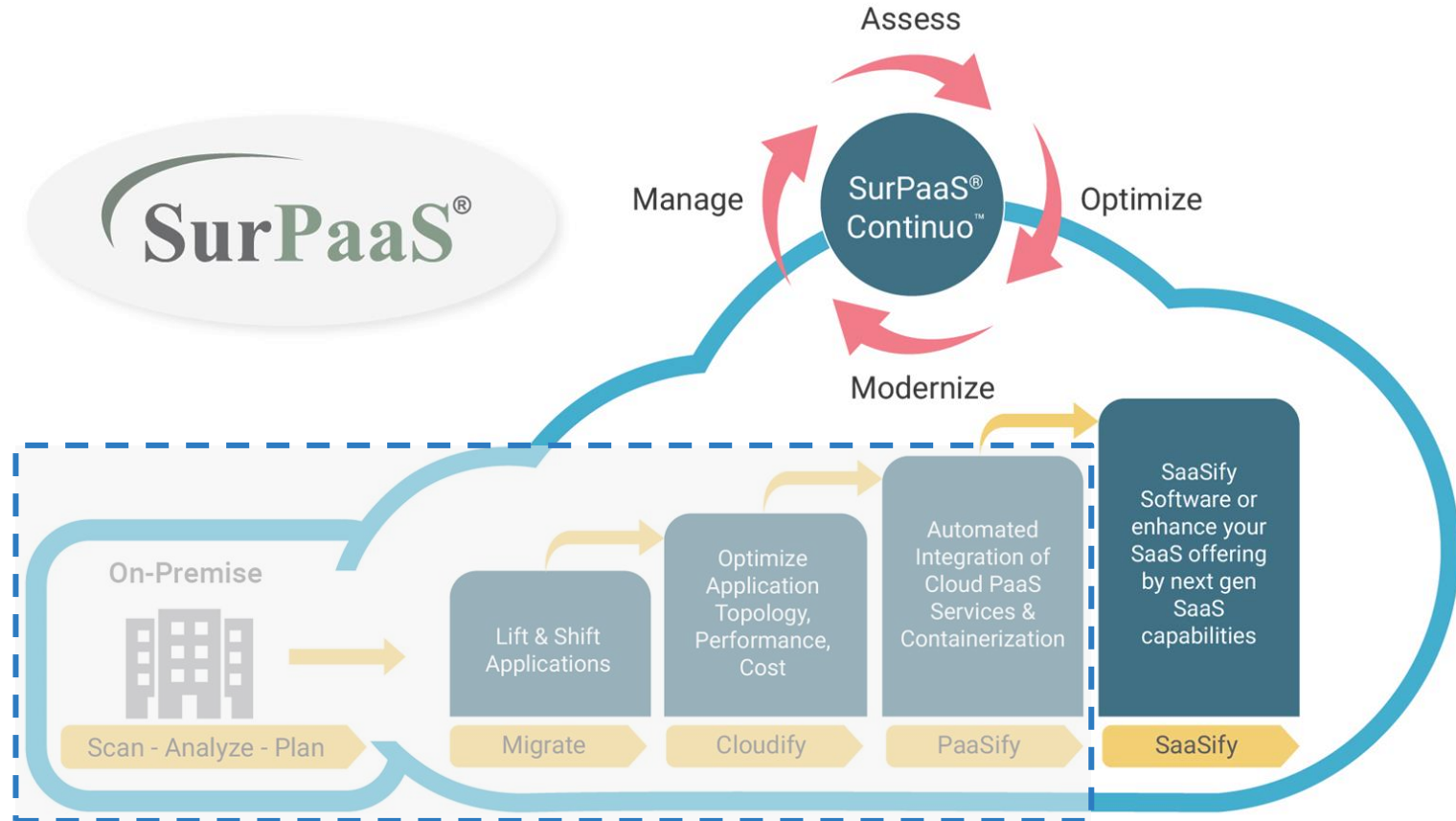


Containerization of workloads



Migration Kubernetes Services

Assessment, Migration and Modernization using SurPaaS



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☐ AWS

- Addressing Government Security requirements
- Migration
- Optimization

☐ Corent

- The Cloud Journey
- Assessment and Migration
- Modernization planning and execution



☐ GDIT

- Challenges in the public sector
- Solutions

☐ Q&A

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9:00 AM

Public Sector Migrations

Neil Kronimus

GDIT Sr. Director,
Cloud Services

GENERAL DYNAMICS
Information Technology



About GDIT

Diverse and Talented Workforce

30,000+
EMPLOYEES

14,000+
TECHNOLOGISTS

7,000+
VETERANS

Global Operations

400
CUSTOMER
LOCATIONS

229
FACILITIES

30
COUNTRIES

Experience

50+
YEARS OF
SERVICE

90+
ALLIANCE
PARTNERS

4,000
CONTRACTS

Who We Serve

- Defense
- Health
- Federal Civilian
- Intelligence Community
- State
- National Security

CLOUD

Cloud transformations made clear.

TALENT

3,000+

Cloud professionals supporting the federal government and state/local

14,000+

Cleared professionals

500+

Cloud certifications

EXPERIENCE

10+

Years of cloud experience

Supporting Cloud at all classification levels

60,000+

Managed cloud instances

80+

Cloud projects

500+

Applications migrated

100+

PB data migrated

200,000+

Migrated email accounts

Challenges in the Public Sector

QUESTIONS HEARD FROM THE PUBLIC SECTOR

What are IaaS, PaaS, SaaS? More importantly, what can they do for my application?

What can the cloud do for my business?

How do I migrate to the cloud? What happens afterwards?

What applications do I have? Can they be moved to the cloud?

How do licenses work in the cloud?

Can I model my cloud architecture?

Is the cloud secure? Does the CSP share in security tasks?

How do I migrate a production application to the cloud without interruption?

How do I determine the cost difference in the cloud?

How do I stay informed of the latest cloud technologies?



GDIT Move 2 Cloud Solution (Cloud Migration)

Move 2 Cloud (M2C) is a structured and secure framework to move an agency's legacy systems and data to the cloud. The framework is platform agnostic, which allows the best technologies from our extensive cloud partner ecosystem to be used to meet customer technology and budget needs.

M2C gives our customers an audit trial through each migration phase:

- **Discover and Assess:**
Understand the portfolio and planning
- **Plan & Migrate:**
Rapidly plan, prepare and move workloads
- **Operate and Optimize:**
Monitor, sustain and ensure optimal performance

Discover & Assess



- Strategy Workshops
- Portfolio Discovery
- App Rationalization & Disposition
- Security Assessment
- Cloud Suitability & Architecture
- Roadmap

Plan & Migrate



- App Categorization
- Migration Planning
- Security & Test Planning
- App Migration
- Migration & Security Testing
- Application ATO Support
- Production Deployment

Operate & Optimize



- Post Migration Support
- Steady State Support
- Infrastructure Optimization
- Service Automation

GDIT STRENGTHS

Workload insights
enriched by automated
discovery tools

Smart rationalization
through 6-R Decision
Framework



Risk mitigation through
migration pilots and
security & test planning

Rapid delivery through
Agile sprints and migration
& recovery automation



Performance optimization
through continuous monitoring,
measurement & tuning

Cloud ROI assurance through
resource monitoring, economic
analysis and service tuning



Choosing the Right Tool

Analysis of Alternatives (AOA) Methodology

Review

- Reviewed past and current public sector migrations
- Analyzed past three years of public sector RFIs and RFPs

Findings

- 80% of migration requirements were the same
- 20% were unique to the agency

Use Cases

- Created use cases based on categorization
- Paper Analysis of Alternatives (AOA) against all COTS, CSP, and Open Source migrations tools available on the market

Testing

- Tested top 10 in a lab and narrowed to top 5
- Corent SurPaaS rose to the top



Public Sector Lessons Learned

Cloud Education,
Communication and Training

Establish a Partnership

Post-Migration
Considerations

Focus on Business
Outcomes

More than just
Technology or Tools

Achieve Authority to
Operate (ATO)

Prioritize Customer
Experience

Collaborate Across the
Organization

Multiple Clouds
Require More Planning

A proper migration process is key when coupled with the right tool and experienced people for modernization success.

GENERAL DYNAMICS
Information Technology

A low-angle, upward-looking perspective of several modern skyscrapers with glass facades. The buildings are arranged in a way that creates a sense of height and scale, with the sky appearing bright and slightly hazy. The central focus is the word "Questions ?" in a large, bold, black sans-serif font.

Questions ?