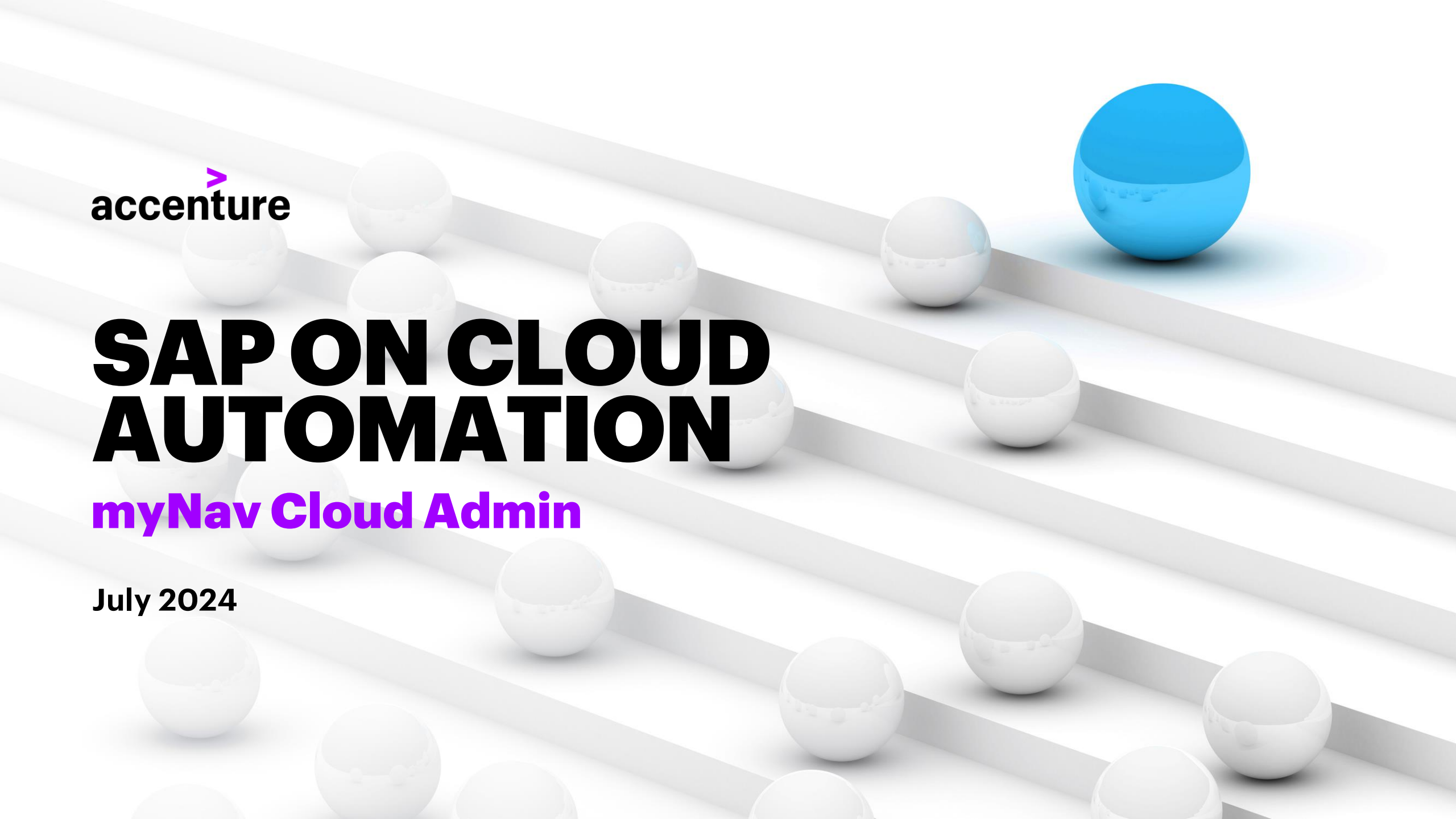


accenture

SAP ON CLOUD AUTOMATION

myNav Cloud Admin

July 2024

myNav Cloud Suite for SAP

Our unique set of tools offer Speed to Market, Increased Quality, Standardization and Cost Efficiency

Cloud Builder

Auto-deploy and landscape life-cycle management

- **Automated Infrastructure and SAP Apps deployment** on Public IaaS platforms based on validated landscape(s), including network, compute, storage & SAP modules
- **Agile development** based on DevOps tools Terraform & Ansible
- Deploy infrastructure and SAP **configuration as a code**
- Automated **validation & documentation** of provisioned infrastructure
- **Industrialization** of best practices for SAP deployments on Public Cloud

✓ **Consistent Landscapes & efficiencies in Infrastructure & SAP Basis provisioning on cloud**

Cloud Migrate

Pre-Migration & Post-Migration Automation

- **Prechecks,** Basis **config extracts**, **validations** & **selective** updates at Source/Target systems
  - SAP Application (Basis)
  - OS
  - Database
- Selective **Cutover** & **Post Migration** steps across multiple layers
- Orchestrated database migrations

✓ **Efficiencies in Basis migration effort**

✓ **Consistent & validated source & target (Cloud) state systems**

Cloud Admin

Supervised SAP Basis automation

- Scripted SAP Basis operations as per best practices
- **Schedule-based starting / stopping** SAP servers for restricted business hours – pay for actual usage
- **Single pane of glass** to manage large SAP estates
- Remote execution in multiple SAP systems simultaneously
- Alleviates SME intervention
- Foundation **for self-healing** with myWizard integration
- User friendly Web based UI

✓ **35+ automation scenarios**

✓ **Kernel upgrade, System Refresh, Client Administration, Transports, HANA patching, Auto Start/Stop, Cluster Administration**

✓ **Self healing scenarios**

Secure Zero Trust Protection OSLogin+

Self-Awareness and Self-Alertness to our Practitioners

- Mitigates accidental errors/risks by including
- **Self-Awareness** to VM users with enhanced login controls
- **Self-Alert** to VM users with enhanced **Visualized Prompt** on critical systems
- Controls to **restrict use of critical commands** at operating system level

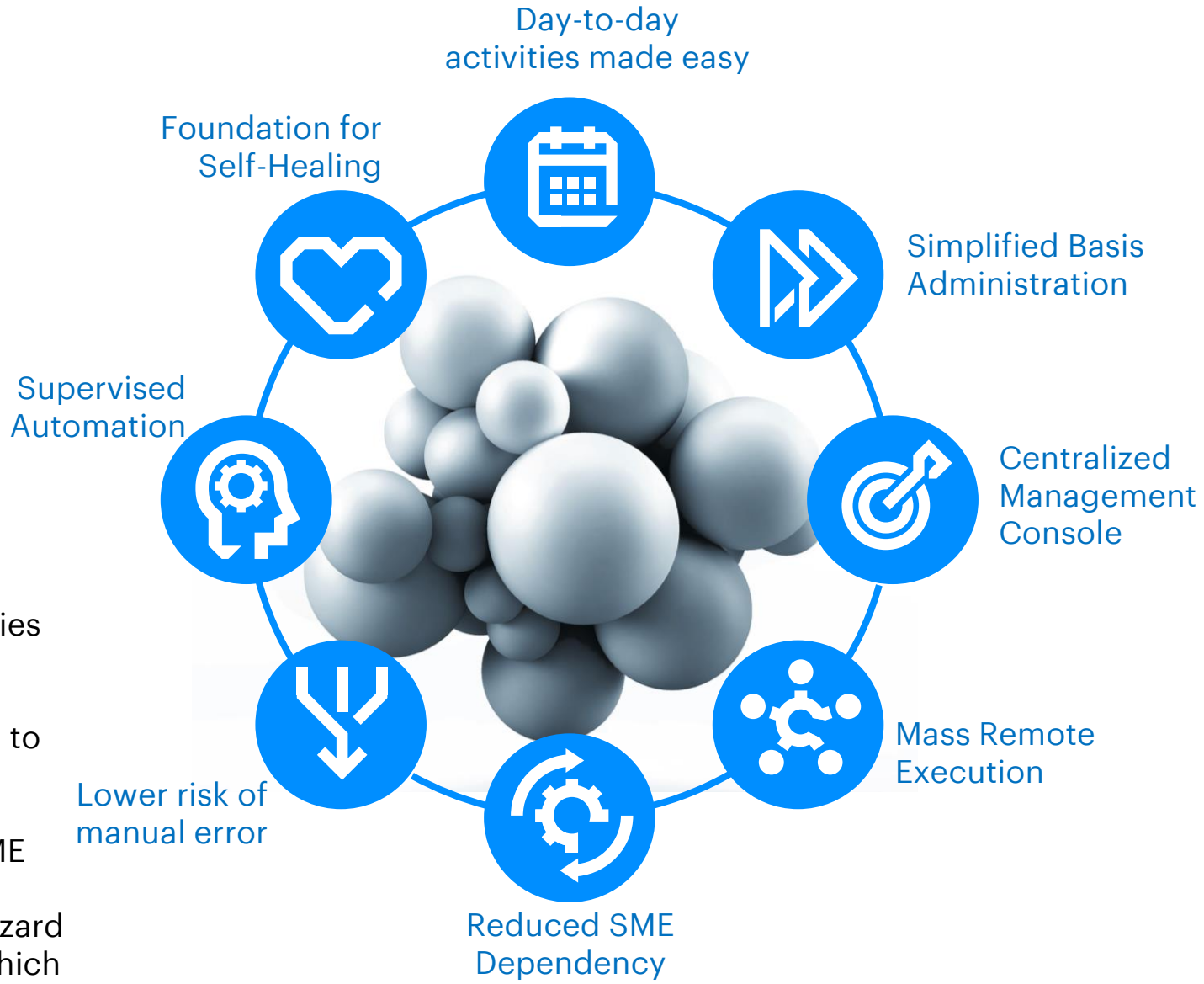
✓ **Improved User awareness for critical missions**

✓ **Prevents unwanted downtimes**

*Refer **myWizard AiOps** for SAP for monitoring solution*

Value Proposition Cloud Admin

Scripted SAP Basis and Platform Ops
35+ Basis Automation scenarios for Job Management, System refresh, Kernel Upgrade, Transport Administration, Local Client copy, etc.



- Cloud Admin is a part of the Cloud Suite tools to simplify day-to-day SAP Basis Administration activities
- Basis tasks can be executed from a centralized UI resulting in faster turnaround and security audit log to capture log for custom scripts
- The tool is easy to use, reduce dependencies on SME
- Automation interfaces are exposed as APIs to myWizard Automatic Ticket Resolver (ATR) and ServiceNow which can be consumed for pre-defined self healing scenarios

Cloud Admin - Basis Administration Scenarios

GA - Available

OS/SAP OPERATIONS

- Auto Start/Stop (SAP/DB/VMs/Host agent)
- Kernel/Host agent Upgrade
- SAP Router Administration
- SAP Profile Parameter Maintenance
- File system housekeeping

HANA OPERATIONS

- HANA DB Revision Upgrade (Add-ons & Client)
- HANA Mini Checks
- Ad-hoc Backup and Restore

SAP APPLICATION ADMINISTRATION

- System Refresh v2.5
- Certificate Renewal (ABAP, Web dispatcher)
- User Management - (Un)Lock, Password reset, Create, Modify
- Open and Close Client
- Client Copy
- Transport Administration
- Enqueue Lock Management
- Printer Configuration
- SNOW and myWizard integration with Cloud Admin

SAP APPLICATION ADMINISTRATION

- RFC Administration
- qRFC Inbound Administration (SMQ1)
- qRFC Outbound Administration (SMQ2)
- tRFC Administration (SM58)
- Idoc Management (List & Reprocess)
- Configuration Logical Server Path
- Apply OSS Note (Single Note only)
- Partner profile creation
- Background Job administration
- House Keeping – Application Tables
- SLT Replication

SAP PERFORMANCE REPORTING

- Backup Status Dashboard
- EarlyWatch Alert Reports Summary
- System performance report

PUBLIC CLOUD OPERATIONS

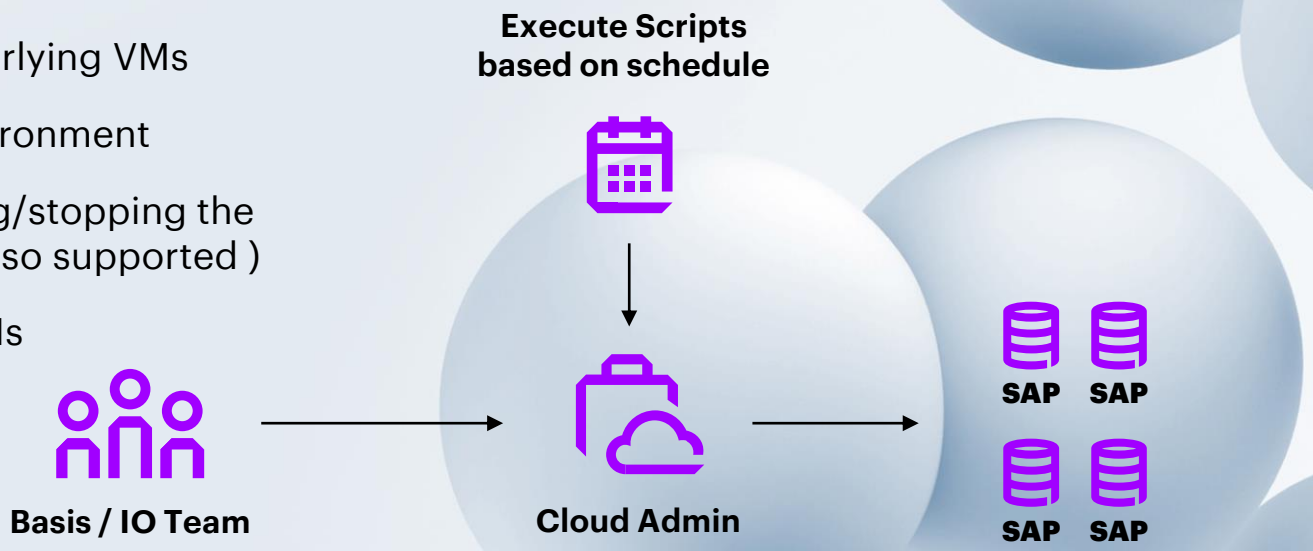
- Cluster Management/Hybrid Clusters
- E2E IO patching automation via integration with myWizard
- VM Disk Swap (Azure)
- SKU Resize (Azure)

Total Automation Scenarios = 35

Auto start/stop

Current features

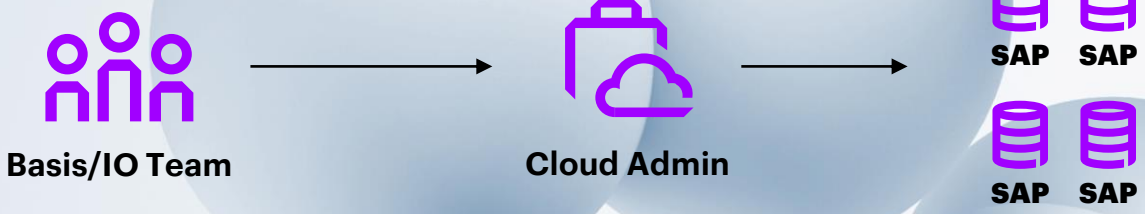
- Auto Start/Stop SAP servers based on schedule
- Soft shutdown of SAP systems while critical users are logged in or critical jobs are running
- Live Status of availability of SAP resources and underlying VMs
- Sequential start/stop of multiple SAP SIDs in an environment
- Auto administration of Cluster systems while starting/stopping the resources (Integration with myWizard automation also supported)
- Flexibility to manage individual SAP resources or VMs
- Self-service portal for ad-hoc Start /Stop
- Supports: Windows/ Linux
- SAP ABAP + Java based servers
- SAP Mobile Platform Auto Start / Stop
- SAP HANA MDC
- SAP Router
- SAP BOBJ / BODS
- SAP Web Dispatcher



Cluster Administration

Current features

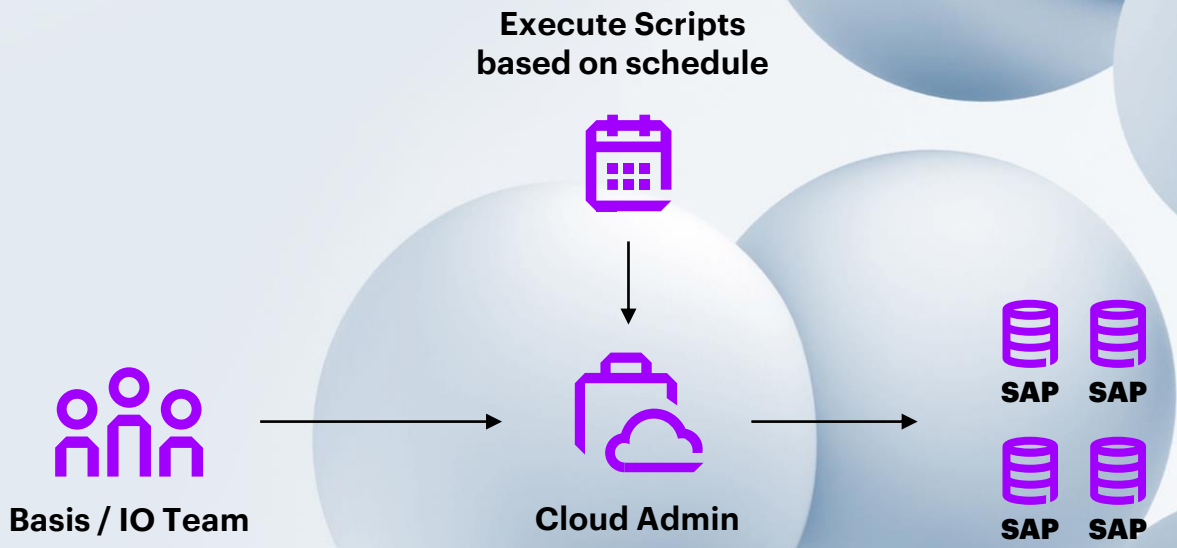
- SUSE/Pacemaker/HANA and RHEL/Pacemaker/HANA combination along with Hybrid clusters supported currently
- Manage the entire cluster from UI
- Cluster segregated into Nodes, Resources, Fence Details for better control and visibility
- Flexibility to control either the App cluster or the DB cluster at once
- Self-service UI to administer all possible operations pertaining to nodes/resources/cluster services.
- Live status of the cluster services, nodes and the resources
- Live status of the node to resource mapping
- Cluster maintenance operations integrated with Auto Start/Stop to reduce manual effort.
- BODS HANA Cluster failover/failback
- Solman HANA DB SUSE HA cluster failover/failback



VM Disk Swap - Azure

Current features

- Storage Interchange between premium and standard on Azure during snooze time
- User can change VM disk type based on a schedule
- Auto shutdown and startup of SAP system resources and VM during execution of swap
- Multiple VMs tagged to a particular environment and SAP system can be selected for operation
- All the associated disks associated with the SAP system can be managed for a swap operation simultaneously
- Live status of the current VM disk type fetched from the server



Basis administration Library

Current Features	In Roadmap	Manual Steps	Constraints	Automation %
Early Watch Alert Report Summary				
Analyze of Early Watch Alert and provide detailed extract of critical Issues, report can be pulled directly from SOLMAN	• Trend analysis if same actions are repeating		EWA file upload is possible only in DOCX format	**50%**
HostAgent Start & Stop				
Start/Stop for Linux Start/Stop for Windows	Weekly reports Testing for High Available cluster	In case of HA the OS level HA services need to be suspended/resumed manually	For high available systems the HA cluster need to be disabled before Start/Stop OS level connectivity only possible via Password and PPK authentication	**80%**
Enqueue Lock Management				
Dialog Work Process – List / Delete all orphaned lock entries older than X hours	Dialog work process - Delete Selected Lock with User Filter Background Work Process - Creating dialog Locks Exceptions to Locks		Lock entries created by Background jobs are not deleted with current release as a precaution to avoid accidents and needs more study	**50%**
Client Administration				
Open and Close Client – using SE06 and SCC4. Schedule client open and close	Client Open/Close with variants to support Non-Prod settings		SE06 setting are cross client, hence opening one client fully will impact the other	**75%**

AUTOMATION% IS BASED ON THE OVERALL TOTAL EFFORT SPENT ON A GIVEN TASK

Basis administration Library

Current Features	In Roadmap	Manual Steps	Constraints	Automation %
House Keeping – Application Tables				
15 reports that are used for housekeeping Basis tables included Large table analysis – Analyzes top 100 tables and a report is generated	Add more housekeeping tables Provide recommendation based on the size of the tables	Variants need to be created in SAP System manually	Customers need to be careful while executing this scenario against different application products	**30%**
Background Job administration				
List, Schedule, Reschedule and Terminate background jobs	Critical jobs monitoring		Jobs with multi step cannot be scheduled Job chain cannot be handled	**50%**
Kernel Upgrade activity				
Windows/Linux – ABAP and Java upgrade for single systems and distributed systems. Rolling Kernel Switch for nZDM Reversal of Kernel incase of failure JVM Upgrade SAP Host Agent Upgrade	Diagnostic Agent (DAA) Upgrade	Target Kernel files (SAR files) to be downloaded and uploaded to the server manually HA cluster needs to be managed manually		**80%**
Local Client Copy				
Local Client copy Copy and overwrite an existing client Create a new client Prerequisites like client copy, client deletion, user master export/import are now integrated along with new version of SCC8N				**80%**

AUTOMATION% IS BASED ON THE OVERALL TOTAL EFFORT SPENT ON A GIVEN TASK

Basis administration Library

Current Features	In Roadmap	Manual Steps	Constraints	Automation %
Printer Configuration				
• Create/Update LOCAL printer • Create/Update Network Printer • Create/Update Email Device • Create/Update Archiving Device • Create/Update Fax Device		Network printer details need to be entered into the UI manually		**60%**
Transport Administration				
Create/Release a Transport Add a Transport to import queue Import Selected Transport Schedule Auto Import job Delete/Create Transport Domain Add System to Transport Domain Configure Transport route	Critical jobs monitoring	Datafiles and Co-files should be copied into the server manually to add a Transport to the queue	Data files and co-files should be accessible at OS level	**50%**
RFC Administration				
Create RFC (ABAP, HTTP, TCP/IP) Update Existing RFC Connectivity Test for the RFC	Create/Update other RFC types RFC Connectivity Report		Advanced RFC types with trusted connection cannot be performed	**60%**
Configuration Logical Server Path				
Create a Logical Server path (FILE TCode) Update existing Logical Server path		OS level folder should be created manually if not existing already	Logical server path will not be added to a transport	**50%**

AUTOMATION% IS BASED ON THE OVERALL TOTAL EFFORT SPENT ON A GIVEN TASK

10

Basis administration Library

Current Features	In Roadmap	Manual Steps	Constraints	Automation %
qRFC Inbound Administration				
• List Inbound queue • Lock/Unlock Inbound queue • Register/Deregister New/Existing queue			Data need to be analyzed by the functional team before execution	**75%**
qRFC Outbound Administration				
• List Outbound queue • Lock/Unlock Inbound queue • Register/Deregister New/Existing destination			Data need to be analyzed by the functional team before execution	**75%**
tRFC Administration				
• List and execute the queue • Execute multiple LUW • Delete LUWs			Data need to be analyzed by the functional team before execution	**75%**
Idoc Management				
• List and Reprocess Failed Idoc			Data need to be analyzed by the functional team before execution	**50%**
HANA Mini checks				
• Schedule and execute HANA mini checks on a regular basis			The sql file needs to be downloaded from the marketplace	**80%**
Report Dashboard				
• Monitor status of backups for Hana and MaxDB in the tool dashboard panel and download report • Monitor expiry of certificates in all systems and download a report as well			Access should be provided to execute the queries	**90%**

AUTOMATION% IS BASED ON THE OVERALL TOTAL EFFORT SPENT ON A GIVEN TASK

Basis administration Library

Current Features	In Roadmap	Manual Steps	Constraints	Automation %
SAP Router Administration				
• Start and Stop SAP Router • Update ROUTTAB file entries	Enhancement to add/remove entries from “routtab” based on inventory			**80%**
Certificate Renewal				
Web dispatcher & ABAP • Create a new PSE • Generate CSR • Import the CA Response • All certificate export feature for one or multiple systems	Java Certificate renewal scenarios	Communication to the CA is manual		**60%**
Apply OSS Note				
• Implement Notes on Development system • De-Implementation of OSS note	Apply notes with dependencies		Cannot implement notes having dependencies & manual corrections	**50%**
Partner Profile creation				
• Creation of Partner profile on the system • Mass Upload of Partner Profiles	Update of Partner Profiles			**20%**
SAP Profile Parameter Maintenance				
• List current profile Parameters, Update changed parameter to the profile directory • Schedule parameter update				**80%**

AUTOMATION% IS BASED ON THE OVERALL TOTAL EFFORT SPENT ON A GIVEN TASK

Basis administration Library

Current Features	In Roadmap	Manual Steps	Constraints	Automation %
SLT Replication				
Setup new SLT configuration, activate, deactivate, delete or update configurations, manage data transfer jobs, Start/Stop/Suspend/Resume Replication, View Statistics				**60%**
User Management				
Mass user Lock/Unlock User Password Reset Mass User Create/Update based on a template provided in the tool				**30%**
System Refresh v2.5				
• Perform Pre-Refresh • Perform Post Refresh Spreadsheet attached shows what's included in V2  Microsoft Excel Worksheet	Preform End-to-End Refresh	DB Copy should be performed manually Steps that are not covered in this list will need to be done manually		**40%**
RFC Connectivity Checker				
Configure Periodic checks for selective RFC with email alert when critical RFCs fails on a system				**50%**

AUTOMATION% IS BASED ON THE OVERALL TOTAL EFFORT SPENT ON A GIVEN TASK

Basis administration Library

Current Features	In Roadmap	Manual Steps	Constraints	Automation %
HANA DB Revision Upgrade				
• Upgrade the HANA DB Revision based on the files provided • HANA 1.0 upgrade is also supported • HA HANA node setup also supported	Further validations and checks	Media to be downloaded manually. Any OS patch required to be applied manually		**60%**
User Management				
Mass user Lock/Unlock User Password Reset Mass User provisioning				**30%**
System Performance Report				**50%**
• Report Generation on Daily/Weekly basis • Provides stats on IDOC failures, ABAP dumps, SMQ1/SMQ2 queues, Response Time, Utilization		EWA report needs to be uploaded		**50%**
Integration capabilities of Cloud Admin with SNOW		Incident or service request needs to be raised from SNOW tool		**50%**
• Printer Creation • Orphaned Locks • Kernel Upgrade • Client Copy • Certificate Renewal • HostAgent start/stop				

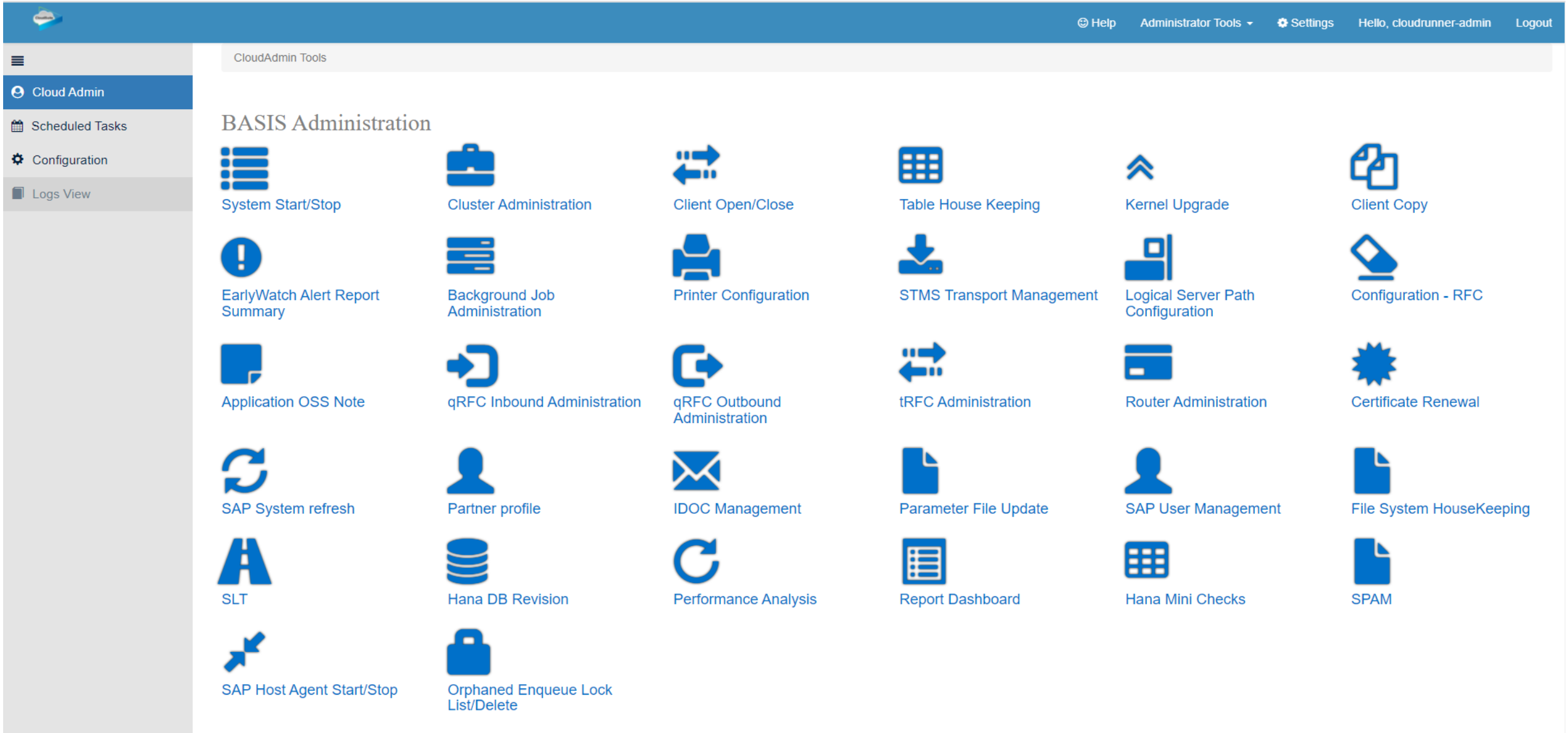
• **AUTOMATION% IS BASED ON THE OVERALL TOTAL EFFORT SPENT ON A GIVEN TASK**

Basis administration Library

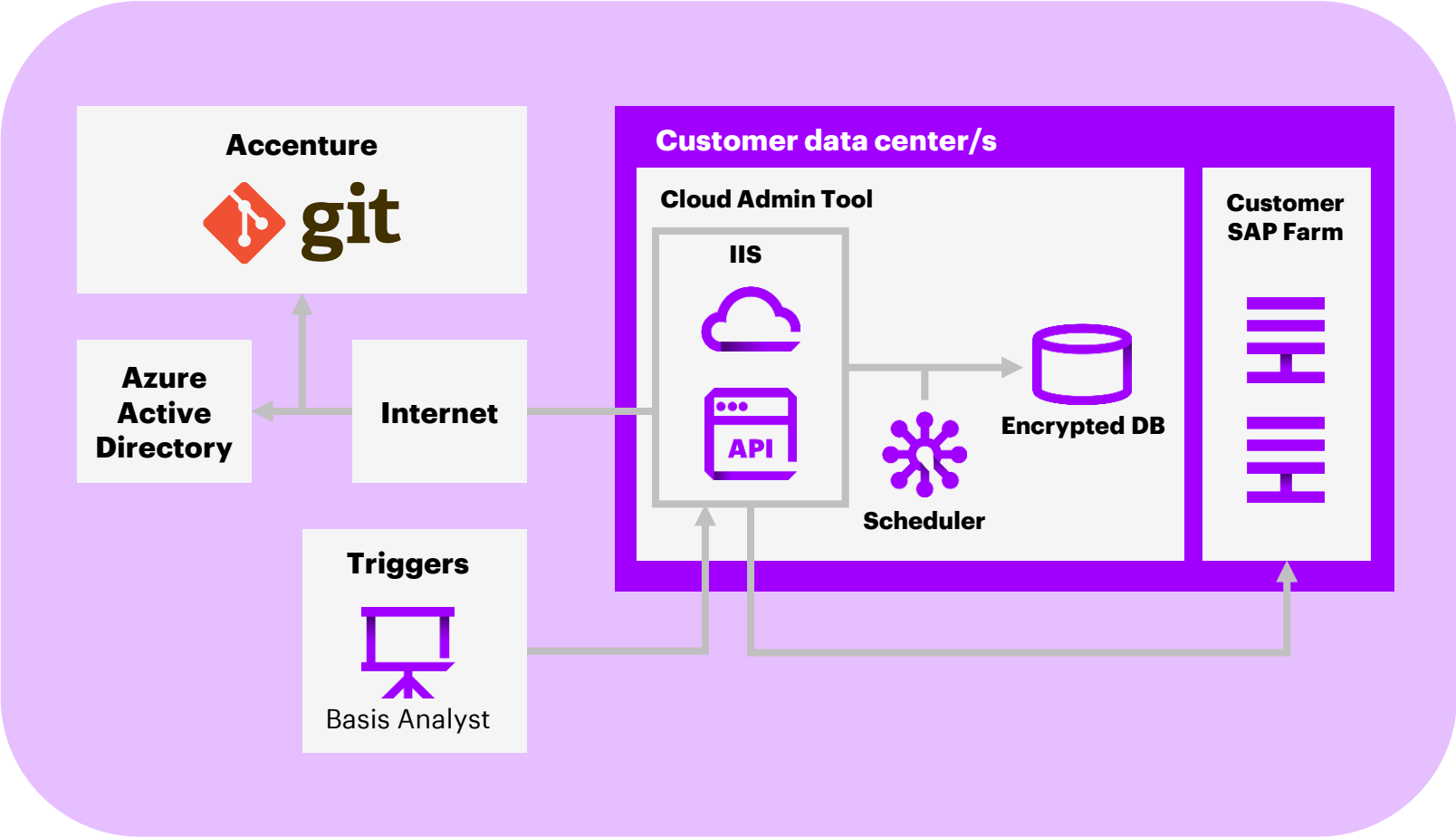
Current Features	In Roadmap	Manual Steps	Constraints	Automation %
Auto Start/Stop				
• Auto Start/Stop SAP servers based on schedule • Soft shutdown of SAP systems while critical users are logged in or critical jobs are running • Live Status of availability of SAP resources and underlying VMs • Opentext Start/Stop support	Inclusion of SKU, VM disk resizing and other HA integration	Only for third party services		**90%**
Cluster Administration				
• SUSE/Pacemaker/HANA and RHEL/Pacemaker/HANA combination supported currently along with support for Hybrid clusters • Manage the entire cluster from UI • Cluster segregated into Nodes, Resources, Fence Details for better control and visibility	Other combination of HA systems to be supported	Adding of cluster system and users in the inventory		**90%**
VM Disk Swap - Azure				
• Storage Interchange between premium and standard on Azure during snooze time • User can change VM disk type based on a schedule	Integration with Auto Start/Stop			**70%**
SKU Resize - Azure				**50%**
• SKU resizing between multiple series of VMs • Scheduled based operation				

• **AUTOMATION% IS BASED ON THE OVERALL TOTAL EFFORT SPENT ON A GIVEN TASK**

Glimpse of Cloud Admin UI



Cloud Admin Architecture



- Cloud Admin tool is installed on a Windows based VM in the client landscape
- Angular .NET based UI used to execute specific Automation tasks
- Authentication for UI against Azure AD
- Inventory database is stored within the client environment

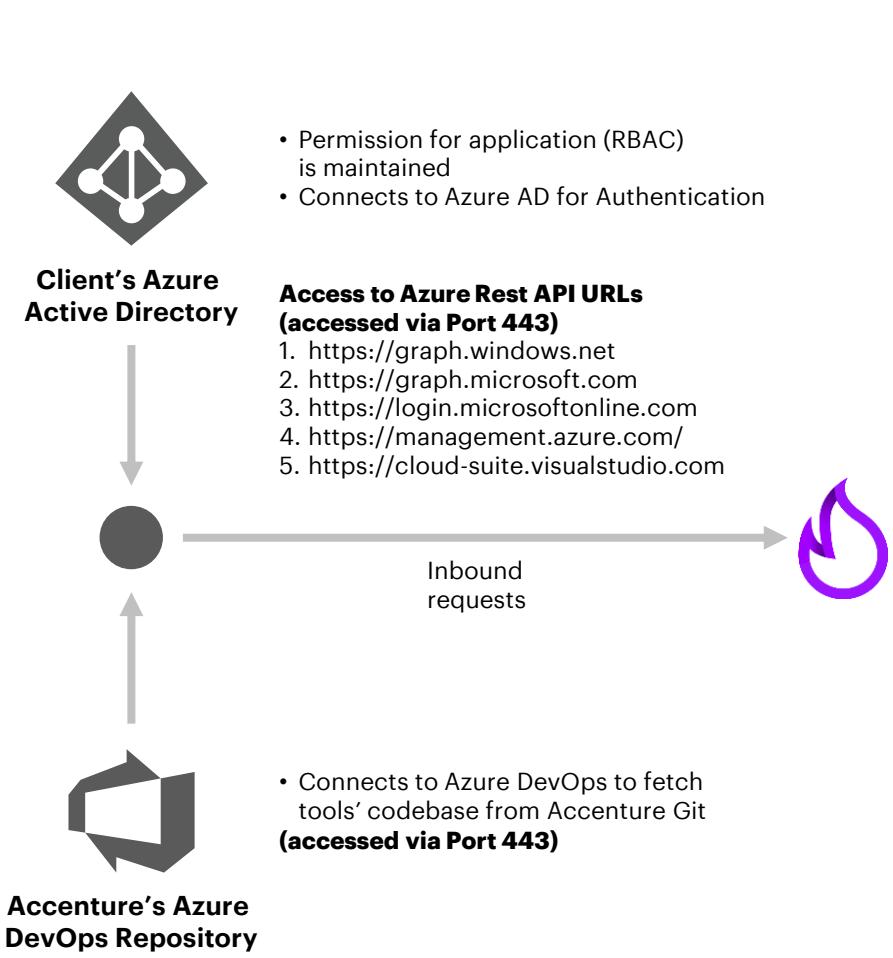
Cloud Admin | Azure Deployment Architecture

Software Installed

- IIS 10, .NET Core hosting bundle, Python libraries, VSTS Private agent, WinRM configuration, WebDeploy, Powershell Core, Google Chrome (Optional), Public Cloud Library (Infrastructure Specific), Netweaver RFC SDK (NWrfcsdk), postgreSQL, Websocket.

Port Enablement

- Cloud Runner/Admin are accessed only within Client's network.
- These tools are deployed in customer subscription in the same VLAN as the SAP server farm. WinRM, ssh and standard SAP ports (36XX, 33XX, 39XX, 80XX) are to be enabled on Client's SAP VMs (XX = SAP Instance Number).
- Basis support team in Client network will access the Cloud Runner/Admin URL with the same mechanism as they would connect to SAP servers.
- Azure REST API URLs need to be accessed via port 443.



Cloud Admin | AWS Deployment Architecture

Software Installed

- IIS 10, .NET Core hosting bundle, Python libraries, VSTS Private agent, WinRM configuration, WebDeploy, Powershell Core, Google Chrome (Optional), Public Cloud Library (Infrastructure Specific), Netweaver RFC SDK (NWrfcsdk), PostgreSQL, Websocket

Port Enablement

- Cloud Runner/Admin are accessed only within Client's network.
- These tools are deployed in customer subscription in the same VLAN as the SAP server farm. WinRM, ssh and standard SAP ports (36XX, 33XX, 39XX, 80XX) are to be enabled on Client's SAP VMs (XX = SAP Instance Number)
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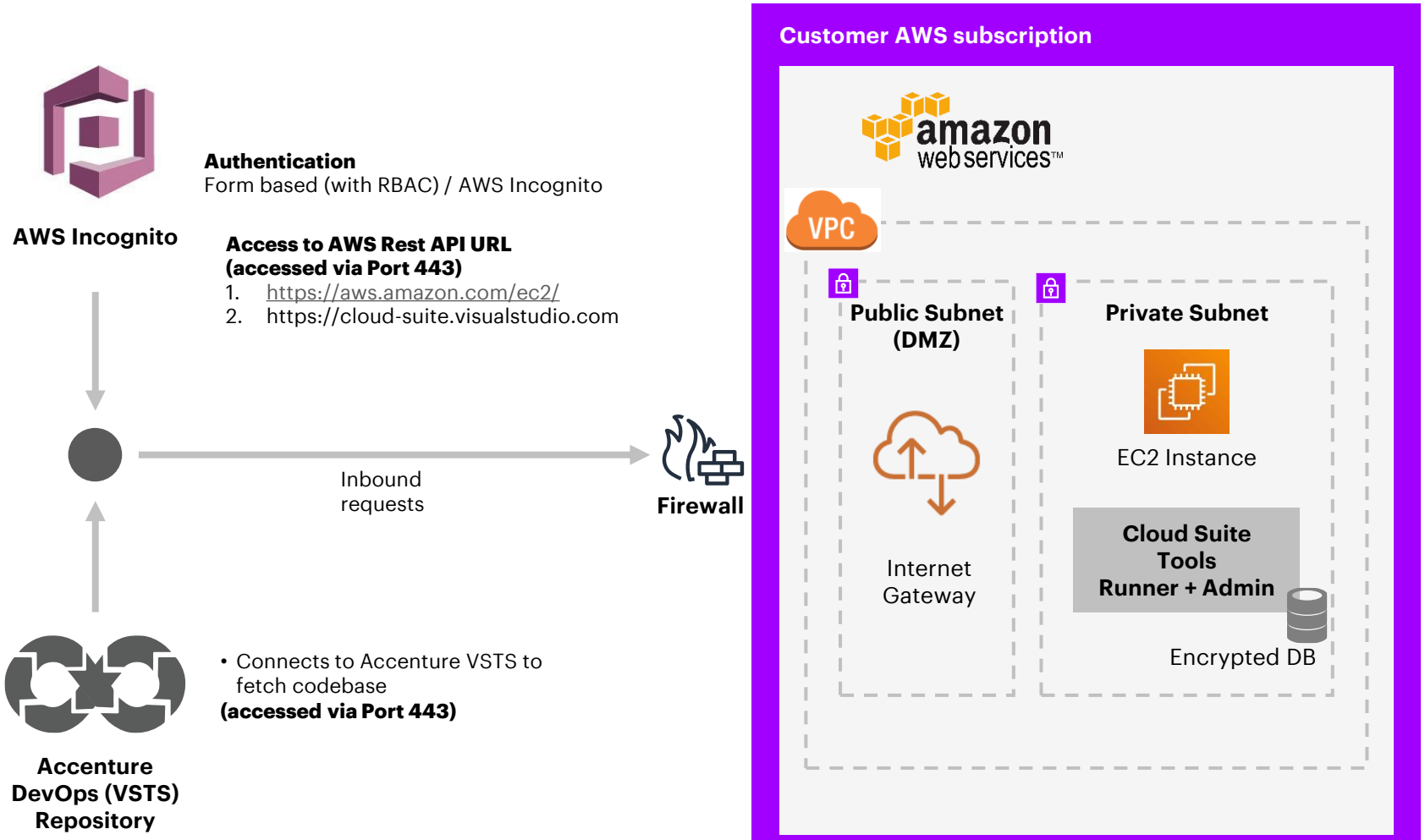

Cloud Admin | GCP Deployment Architecture

Software Installed

- IIS 10, .NET Core hosting bundle, Python libraries, VSTS Private agent, WinRM configuration, WebDeploy, Powershell Core, Google Chrome (Optional), Public Cloud Library (Infrastructure Specific), Netweaver RFC SDK (NWRFCSDK), postgreSQL, Websocket.

Port Enablement

- Cloud Runner/Admin are accessed only within Client's network.
- These tools are deployed in customer subscription in the same VLAN as the SAP server farm. WinRM, ssh and standard SAP ports (36XX, 33XX, 39XX, 80XX) are to be enabled on Client's SAP VMs (XX = SAP Instance Number).
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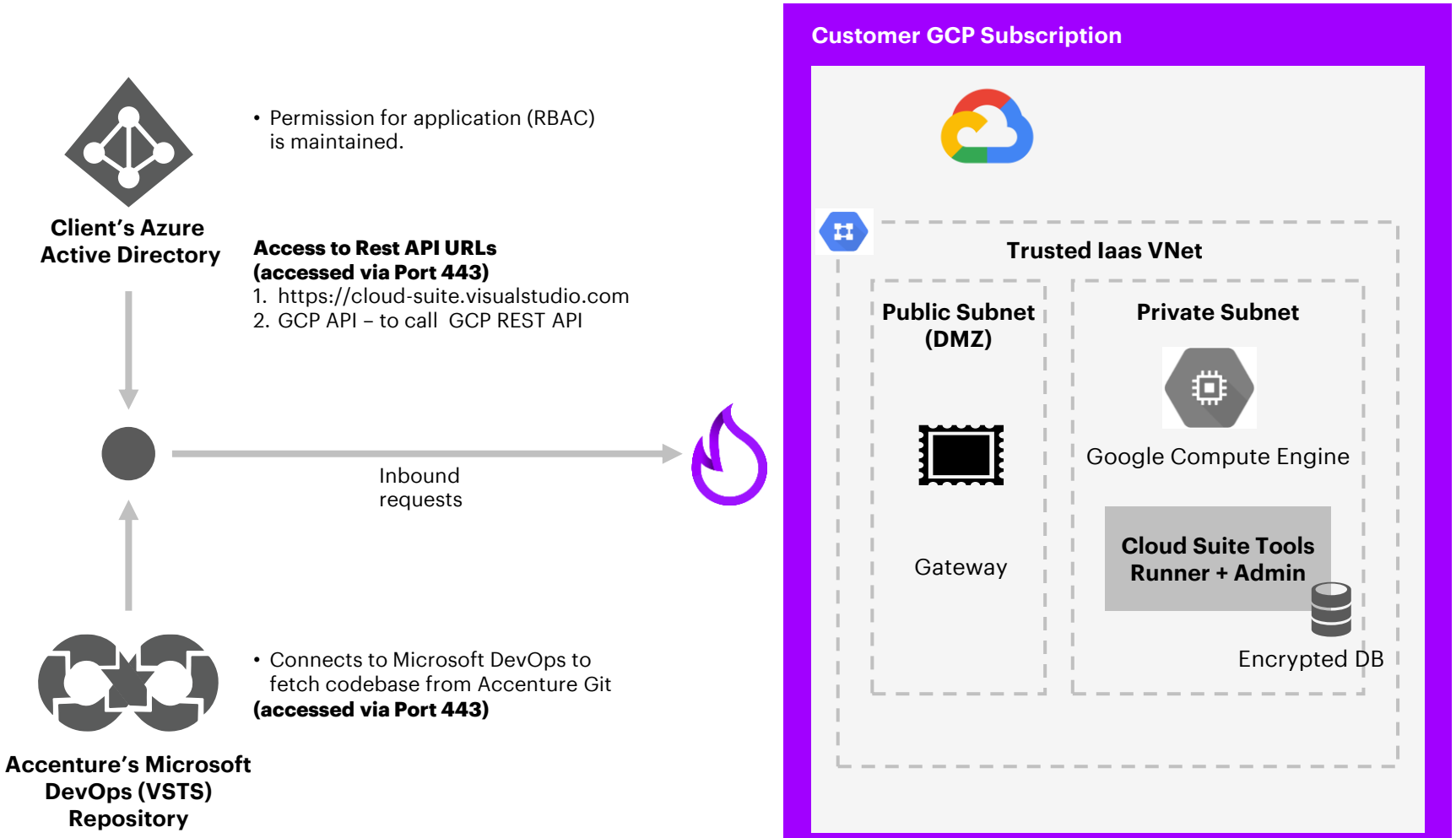


Cloud Admin | Technical Prerequisites

Hardware Requirement – Cloud Admin Tools Server

- Recommended Hardware requirement - 4 CPU + 16GB RAM
- Hard Disk - 100GB (excludes Operating system space)

Software Requirement – Cloud Admin Tools Server

- Operating System: Windows Server 2024 +
- User Access Level: Admin, Other Software: Cloud Admin Tools

Port Enablement

- Cloud Admin Tool resides in the customer's landscape together with the SAP server farm. SAP, OS, DB ports need to be opened between as per the usage scenario
- Basis team need to access the IIS URL with port 61235 over VPN
- URL https://cloud-suite.visualstudio.com should be accessible from the Cloud Admin tools VM to sync up latest code

Software installed with Cloud Admin Tools

- IIS 10
- .NET Core hosting bundle
- Python and libraries as pyRFC, WinRM, paramiko
- WinRM Configuration
- VSTS Private agent
- WebDeploy
- Powershell Core
- Google Chrome (Optional)
- Public Cloud Library (Infrastructure Specific)

Managed System Configuration

ABAP Systems

- SAP_BASIS version 731 and above recommended
- Transport *FIOK900931** to be imported to enable the RFC Program.
  - This transport comprises 3 objects Package - ZACC_BASISAUTOMATE, Function Group - ZBASIS_FG_ACCWRAPPER and RFC-enabled Function Module - ZBASIS_RFC_ACCWRAPPER that will facilitate processing within the SAP system.
- ABAP Service user with roles required to perform the scenarios

OS Connectivity - Windows

- SIDADM Credentials for Kernel Upgrade, System Refresh or any Administrator credentials for Start/Stop Systems
- WinRM Service need to be enabled for remote execution

OS Connectivity - Linux

- SSH based credentials, supports Password, PPK and PEM based authentication with SUDO user mechanism

Refer the details Pre-Requisite document for more details → Document

* - TR number may change based on the development. Connect with the CloudSuite team for the latest TRs

SMTP server configuration details required for email notification.

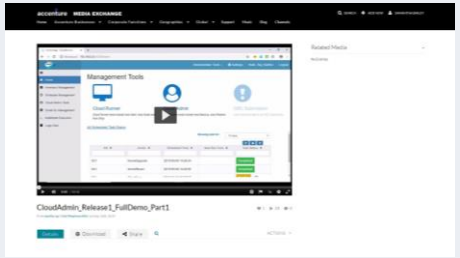
VM mapping if in Public Cloud

Tools	Azure	AWS	GCP
VM details	D4a v4	m5.xlarge	n1-standard-4

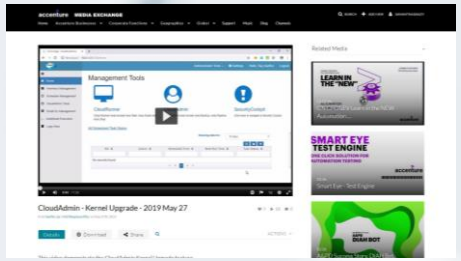
APPENDIX

Cloud Admin
Demo Links

Glimpse of Cloud Admin



Release 1



Kernel Upgrade

Microsoft Excel Worksheet

Efficiency Calculator

Required Ports

Between SAP and Cloud Suite tools

Port Type (TCP/ UDP/ Other)	Port Number*	Purpose
TCP	33XX	For Cloud migrate to connect SAP Application Servers, (to be opened for all App servers)
TCP	32XX	For Cloud migrate to connect SAP Dispatcher server port (to be opened for all App servers)
TCP	36XX	For Cloud migrate to connect SAP Message server port
TCP	22	SSH Port for connecting Linux systems
TCP	5985	WinRM port for Windows System connection
TCP	5986	WinRM port for Windows System connection (as required)
TCP	1433	MSSQL Port (as required)
TCP	3XX13	HANA SYSTEM Database Port (as required)
TCP	3XX15	HANA TENANT Database Port (as required)
TCP	5000	ASE Default Port (as required)
TCP	50000	DB2 Default Port (as required)
TCP	1521	Oracle Listener default port (as required)

* - Respective ports as per client customization

Standard Cloud Admin Guidelines (1/2)

- **Cost and Usage**
  - Pricing of Year 1 is a combination of License cost + labor cost for tool installation with initial setup, minor customer specific enhancements, 3-4 system integration along with testing of features and a KT to the delivery team
  - From Year 2 onwards the chargeback cost includes tool license cost (based on SIDs), deployment of patches/upgrades, support for issues and bug fixes.
  - NOTE: The tool can be used only by Accenture and when Accenture comes out from the support the tool will be removed from the client landscape.
  - Only Accenture folks working in the project should be provisioned with access to this tool, no 3rd party vendors to be provisioned with access.
  - Accenture Basis delivery team supporting the customer will be primarily responsible for handling the automation features from the tool. Cloud Admin team will provide KT on the features and handover to the delivery team but will be responsible for any tool related issues.
- **Setup, Implementation and Support**
  - Cloud Admin initial deployment and future upgrades can be done within one working day.
  - Post implementation Cloud Admin team will guide the integration and testing of various scenarios in 3-4 SAP systems. This initial testing of various scenarios across systems should be completed within Year 1 or it might incur additional effort cost during Year 2 along with license cost.
  - Post handover, if there is any team transition like Project Team to Run team, for that Project Basis team will be responsible to provide KT about the Cloud Admin tool to the project Run team.
  - Cloud Admin team will support any issues related to the tool for the entire duration the tool will be present in customer landscape.
  - Cloud Admin team does not work in a 24/7 model which is why prior intimation will be required if any support is needed from the team outside standard business hours.
  - Cloud Admin team will seek approval and deploy whenever there is an enhancement available for the tool. This is again applicable for the entire duration the tool will be present in customer landscape.

Standard Cloud Admin Guidelines (2/2)

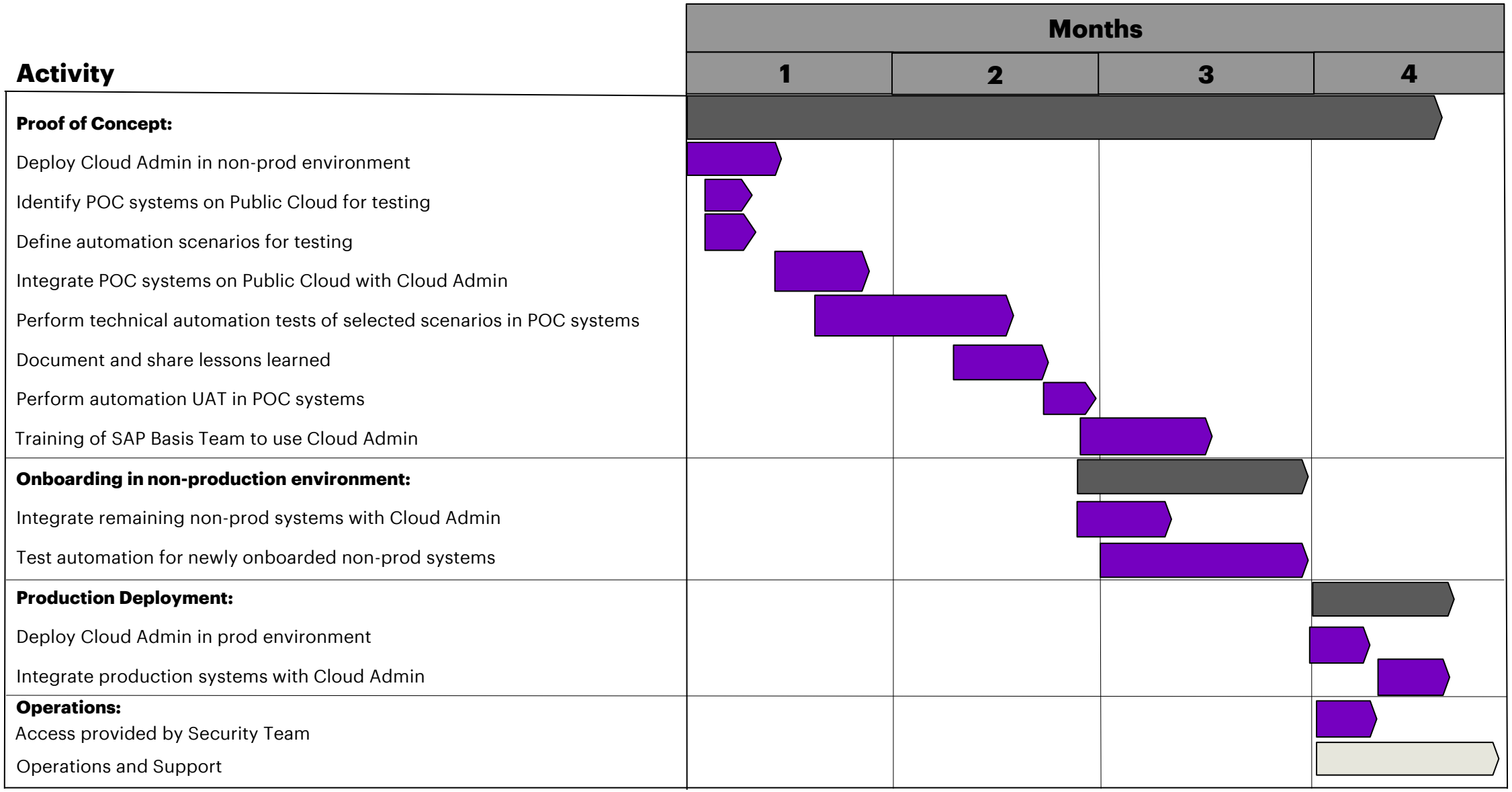
- **Planned & Unplanned Maintenance/Operation**
  - During a planned maintenance/operation from the automation tool outside India business hours/weekends, prior intimation will be required for allocating support member(s) from the Cloud Admin team.
  - During the presence of Cloud Admin developer if any issues occur, then the individual will try to resolve it if it is a quick fix or else it will be carried over to the next working day. It is recommended to proceed with the manual approach in such events.
  - During unplanned maintenance/operations or post handover of the tool if any issues occur while doing any activity from the tool outside India business hours/weekends then a support member will not be available to troubleshoot.
  - In the event there is an issue with the Cloud Admin tool during unplanned maintenance/operation outside India business hours/weekends, it is recommended to proceed with the activity via manual approach and report the issue to the Cloud Admin developer.
  - The response time of the Cloud Admin developer in such events will be next working day.
- **Cloud Admin Contacts**

Support Contact/Escalation	Name/ID	Role
Contact Level 1	J2C.Co-Dev.Team@accenture.com	Cloud Admin Developer
Contact Level 2	Bikash Chandra Das/bikash.chandra.das@accenture.com	Cloud Admin Developer
Contact Level 3	Arindam Ganguly/arindam.ganguly@accenture.com	Cloud Admin Product Owner
Escalation	Karthic Raj/karthic.raj@accenture.com	Cloud Suite Automation Lead

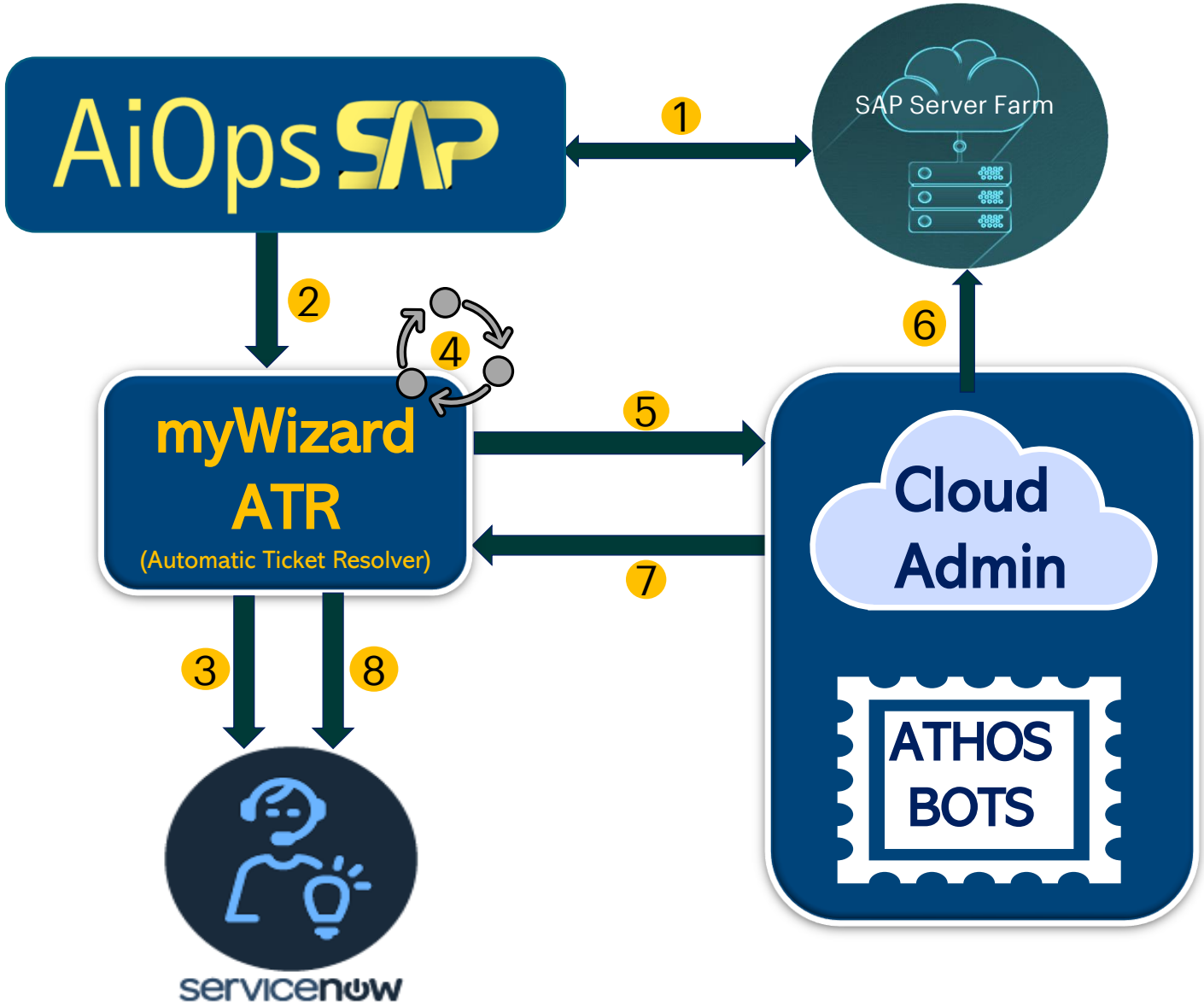
Cloud Admin Integration Tasks

SL No.	Activity	Team
1	Cloud Admin tool server setup	Client IO Team
2	Local admin user creation to run Cloud Admin tool from IIS & task scheduler	Client IO Team
3	Onboarding, Tools server access & VPN Access to Cloud Admin team members for tool deployment	Client IO Team
4	Cloud Admin tool deployment by SAP Cloud Admin Team.	SAP Cloud Admin Team
5	Cloud configuration for VM start/stop	Client IO Team
6	Capture SAP server details in the inventory excel template	Client SAP BASIS Team
7	Infrastructure Connectivity Details(Required OS, SAP & Tools Port enable)	Client SAP BASIS & IO Team
8	OS service account creation with permission to start/stop sap services & db.	Client IO Team
9	RFC user creation(only for ABAP system)	Client SAP BASIS & Security Team
10	SAP Transports imports- Required for only Cloud Admin ABAP features	Client SAP BASIS & Security Team
11	Configured inventory data in tool & data validation	SAP Cloud Admin Team/Client SAP BASIS Team
12	E2E Testing by SAP Cloud Suite Team (SAP Servers downtime required)	SAP Cloud Admin Team/Client SAP BASIS Team
13	KT & handover will be provided to Client SAP BASIS Team on Cloud Admin tool	SAP Cloud Admin Team/Client SAP BASIS Team

CLOUD ADMIN:
SAP BASIS AUTOMATION TIMELINE



Cloud Admin Self Healing Portal Framework



1 – *"myWizard AiOps for SAP"* provides monitoring capabilities for SAP systems

2 - Alerts are triggered based on defined KPIs & metrics for SAP systems

3 - myWizard ATR (Automatic Ticket Resolver) receives alerts and opens a ticket or pulls the required data from ITSM tool (e.g. Service Now)

4 – Self Healing automation is triggered by ATR (for configured scenarios)

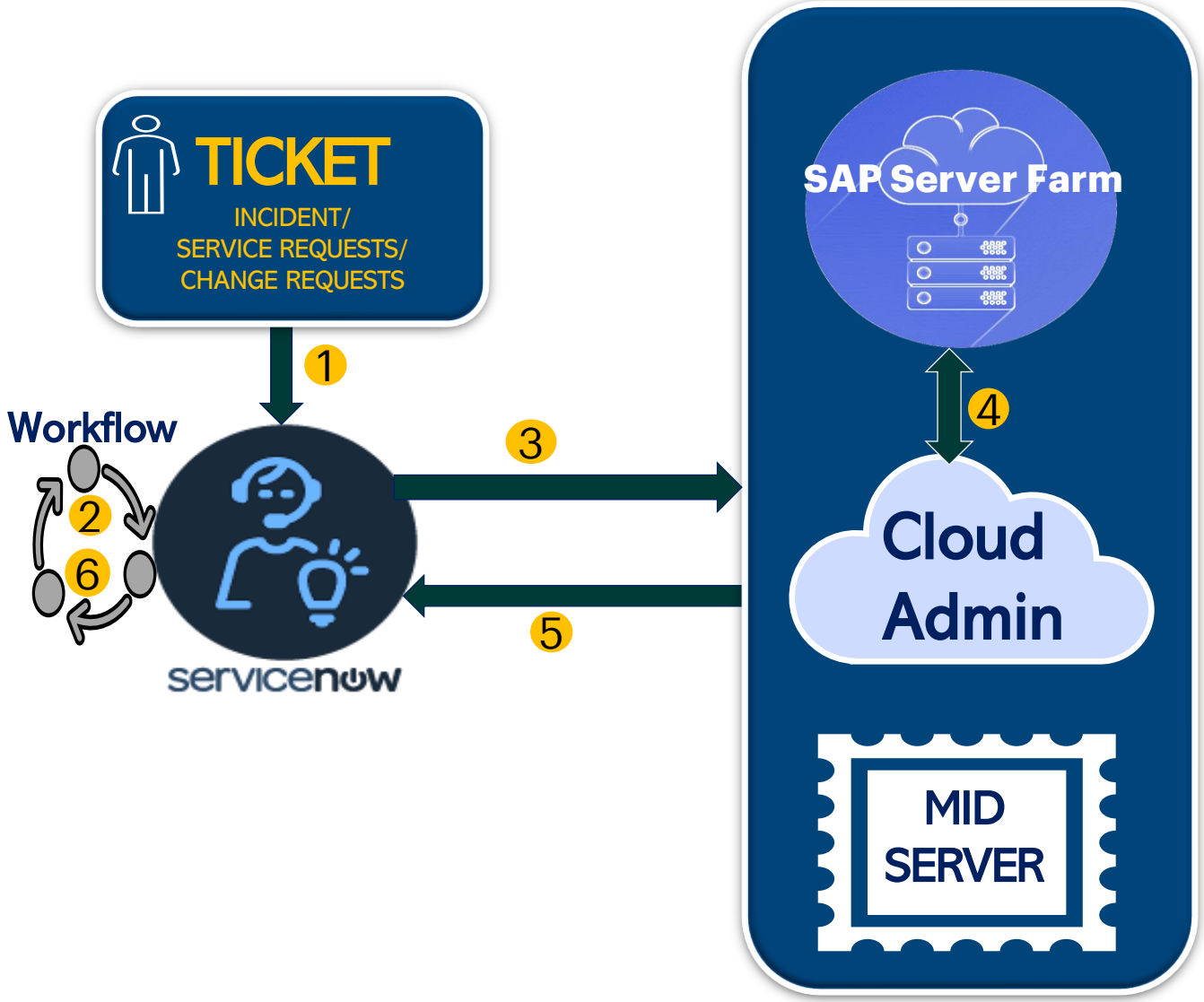
5 – Cloud Admin APIs are invoked to execute configured scenarios related to infrastructure and myWizard; ATHOS Bots are executed for ABAP scenarios

6 – Actions executed on the prescribed system for resolution on target SAP system

7 – Acknowledgement for the action executed is sent back to ATR

8 – If response is successful, ticket in ITSM tool gets closed, otherwise left open for manual action by system administrator

Cloud Admin – ServiceNow Integration Flow



1 – Users open tickets in SNOW. Incidents or Service Requests or Change Requests

2 – ServiceNow automation workflow is triggered based on the approvals

3 - ServiceNow invokes an ASYNC API call to CloudAdmin via midserver.

4 – Cloud Admin perform actions on the prescribed system for resolution on target SAP system

5 – Acknowledgement for the action executed is sent back to ServiceNow via an API call.

6 – If response is successful, ticket in ServiceNow gets closed, otherwise left open for manual action by system administrator. Workflow can be further tuned to send emails on the status of the automated action

Cloud Admin Compared with LaMa 3.0 SP19 | Key items

Use Cases	Cloud Admin	SAP LaMa
Centralized Landscape Management	Yes	Yes
Scheduling Engine	Yes	Yes
Automate Provisioning of SAP System / DI - Clone, Copy	Planned	Yes
Automate System Refresh	Yes	Yes
Simplify HANA System Operations	Planned	Yes
HANA Mini Checks	Yes	No
HANA Revision Upgrade with supporting components	Yes	Limited
Automate tasks using REST API	Yes	Yes
Backup Status Dashboard	Yes	No
SAP system performance analysis	Yes	No
Early Watch Alert Report Summary	Yes	No
System Start/Stop/Restart	Yes	Yes
Host Agent upgrade	Yes	Yes
Host Agent Start Stop Process, Send weekly Report of the status	Yes	Yes
Lock Entry Management	Yes	No
Client Opening & Closing Process	Yes	No
Client Copy - Local Client Copy	Yes	No
Application Log table House Keeping	Yes	No
Job Administration, List, Schedule, Terminate + Critical Jobs Monitoring	Yes	No
Kernel Upgradation Activity - Traditional	Yes	Yes
Kernel Upgradation Activity - RKS	Yes	Yes
Printer Configuration - Local, Archiving Device, Mail/Fax, Network Printer	Yes	No
Transport Administration - Schedule Auto-Import, Selective Import, Release TRs	Yes	No
Configuration - Create/Update Logical Server Path	Yes	Yes
Configuration - Create/Update RFC Destinations	Yes	Yes
Java Post Copy automation	No	Yes

THANK YOU

