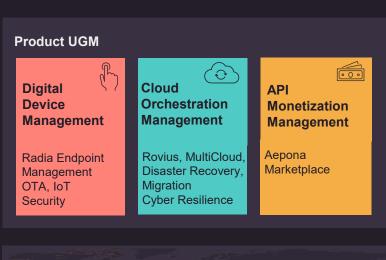
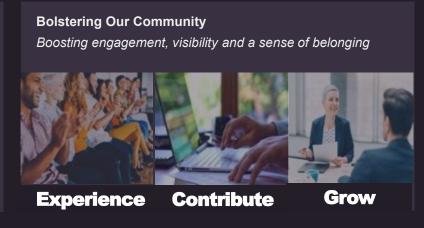


### Persistent

#### **We Connect User Group**

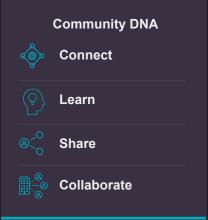
















#### **Rovius Overview**

#### **Multi Tenant Managed Cloud Infrastructure**

Supports large Scale infrastructure setup in single / multiple zones and regions

Simple, Turnkey Cloud Orchestration with support for popular Hypervisor types

Supports Rapid Provisioning / Deprovisioning, Service automation at all levels

2K+

Servers in a Single deployment

>10

Years of laaS Orchestration 100s

Of deployments on a single day



#### **Unified Management Console for Multi Cloud**

| Kubernetes Cluster support                                |  | o scale architecture  | Service Automation &   |
|---|--|---|--|
| Rapid Provisioning / Deprovisioning capabilities          |  | 51.11   |  |
| Multi Tenant Support and Account Management               |  |   | Orchestration  |
| Disaster Recover  | у  | Hypervisor types  |  |
| Infrastructure Migration<br>/ Resource Monitoring         | ration   | Cost & Budgeting  |  |
|   |  | Accounts & Project Management   |  |
| Cloud Portal Business Manager w/ e2e Business<br>Coverage |  | Containers  |  |
|   | Provisioning capability  Account Managem  Disaster Recovery  Infrastructure Mig  / Resource Monito | rovisioning capabilities  Account Management  Disaster Recovery  Infrastructure Migration / Resource Monitoring  Cloud Portal Business Ma | rovisioning capabilities  Account Management  Disaster Recovery  Infrastructure Migration / Resource Monitoring  Cloud Portal Business Manager w/ e2e Business |

#### **Latest Offerings**

- \ Account & ITaaS Management
- \ Pricing & Billing
- Integration with CRM / Ticketing systems
- Dashboard for Monitoring
   Resources / Deployments

**Key Offerings** 

- \ laaS on Rovius CP, CloudStack, OpenStack
- Easy to scale architecture
  Rapid Provisioning /
  Deprovisioning capabilities
  Platform support for variety
  of OS and Hypervisor types
  CPBM covers e2e business
  scenarios
- Lower TCO Compared with other cloud platforms

**Core Differentiators** 

- Unified Console for private / public clouds
- Multi Cloud Support and Account Management
- Quota and Policy Management
- Cloud Cost & Budgeting
- Catalog Management & Infrastructure Migration
- Note: Note:
- Kubernetes Cluster Support
- Monitoring & Approvals
- Mobile Ops Support

New Offerings

**Rovius Cloud Platform** 

#### **Need for Enterprise Cloud Operations — CloudOps**

# **Public Cloud** aws Azure Red Hat **S** Google Cloud **Private Cloud KVM** Microsoft Hyper-v

**Abstraction** 

| Top Reasons Why Enterprises Need CloudOps |                               |                               |                                |  |  |
|---|-------------------------------|-------------------------------|--------------------------------|--|--|
| Centralized<br>Management                 | Rapid<br>Orchestration        | Resource<br>Optimization      | Monitoring And<br>Control      |  |  |
| Integrated Secu                           | Efficient DR And<br>Migration | Integrated Cost<br>Management | Enterprise Apps<br>Integration |  |  |
| Top Challenges Faced Today                |                               |                               |                                |  |  |
|   |                               | \$                            |                                |  |  |
| Resources                                 | Complexity                    | Time & Cost                   | Subscription                   |  |  |
| tomation                                  | Viability                     | Control                       | Security                       |  |  |

CloudOps

#### **Multi-cloud Management Tools use cases**

# Cloud provisioning and orchestration.

Using the tool primarily to automate cloud resource provisioning/deprovisioning/modification.

### Cloud service brokering.

Using the tool primarily to manage the interaction between cloud consumers and providers.

### Cloud governance.

Using the tool primarily to enforce policies and controls to ensure compliance with best practices of cloud activity.

### Cloud resource management.

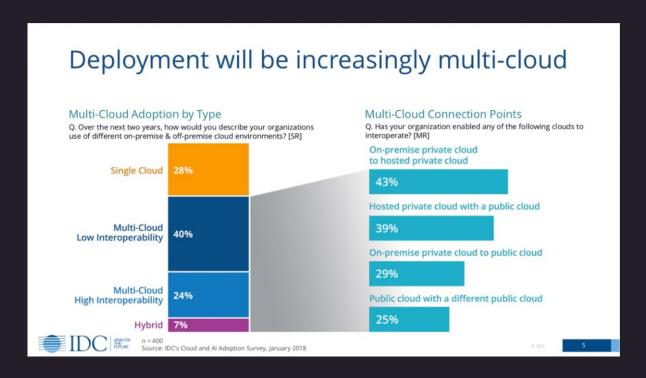
Using the tool primarily to manage the overall cloud estate (for example, cost tracking and cloud resource optimization).



#### **Multi Cloud Deployment Trends**

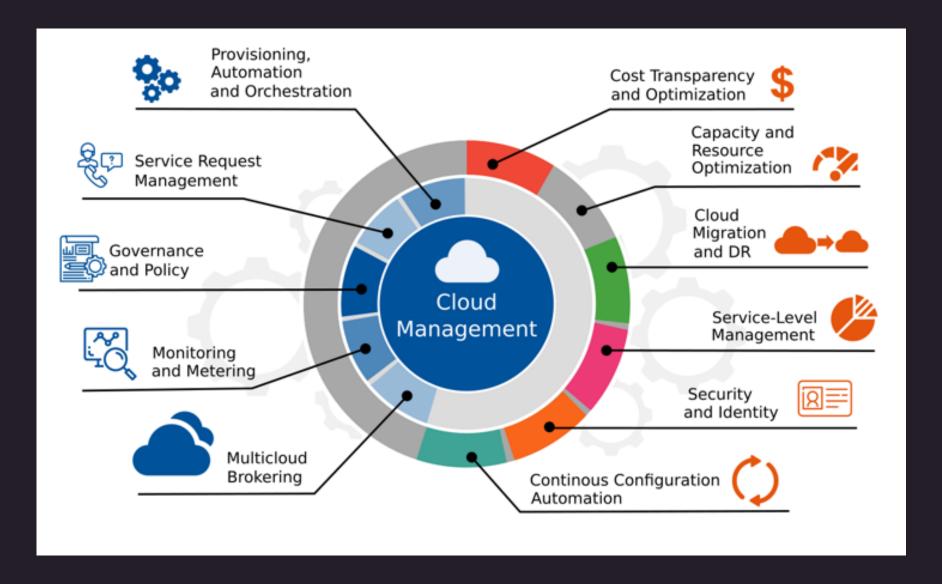
Although private and hybrid cloud deployments are preferred from the data security standpoint, Multicloud has emerged as the favorite for a significant number customers falling in the band of SMEs.

Whaving multiple cloud environments ensures that you always have compute resources and data storage available so you can avoid downtime. Compliance: Many multi-cloud environments can help enterprises achieve their goals for governance, risk management and compliance regulations."





#### **Need for Multi Cloud**





#### **Rovius Cloud Orchestration Platform**



### Provisioning & Orchestration

Standardize operations across multiple clouds

- Auto-deploy applications using standardized blueprints.
- Cost estimation and Optimization recommendation for workloads
- Monitoring & Reporting on resources at Tenant, Department, Data Center and user levels across multiple clouds
- Service catalog which applies across multiple clouds
- \ Updates and Patching
- APIs for 3<sup>rd</sup> party integration



## Account Management

Tenants and users across a multi-cloud infrastructure

- Fine grained RBAC at Organizational, Departmental, User, Region, Zone and Data Center level.
- Manage multiple tenants from a single dashboard as an MSP
- Consolidated billing and breakup by tenant, Account, Department, Cloud infra and Data center
- \ Secrets Vault Service



#### Security

Automated Alerts, Security Policies and Validation

- Enforce strong access control policies based on regions, depts.
- Automated implementation of standard compliance policy definitions
- Regulatory compliance validation of deployments
- Dashboard to notify compliant and non-compliant resources.
- Generate Compliance Reports for tenants, accounts and departments.
- HIPAA, PCI, Enterprise standards



## Costing and Budgeting

Visibility and control over all tenants and users

- Single pane of glass to monitor and view consumption, cost and performance for each tenant, departments, data center and users.
- Report under and over utilized resources and provide advisory
- Cost analysis and cost advisory
- Budgeting alerts and trigger workflows based on thresholds
- \ Auto scale



# Disaster Recovery

Protect workloads in a multi-cloud environment

- Protect applications, systems, databases, and data on any public or private cloud infrastructure.
- Cold, Warm and Hot DR Options based on RTO and Cost preference.
- Complete control of your data with CSEK encryption keys.
- Ransomware detection and remediation



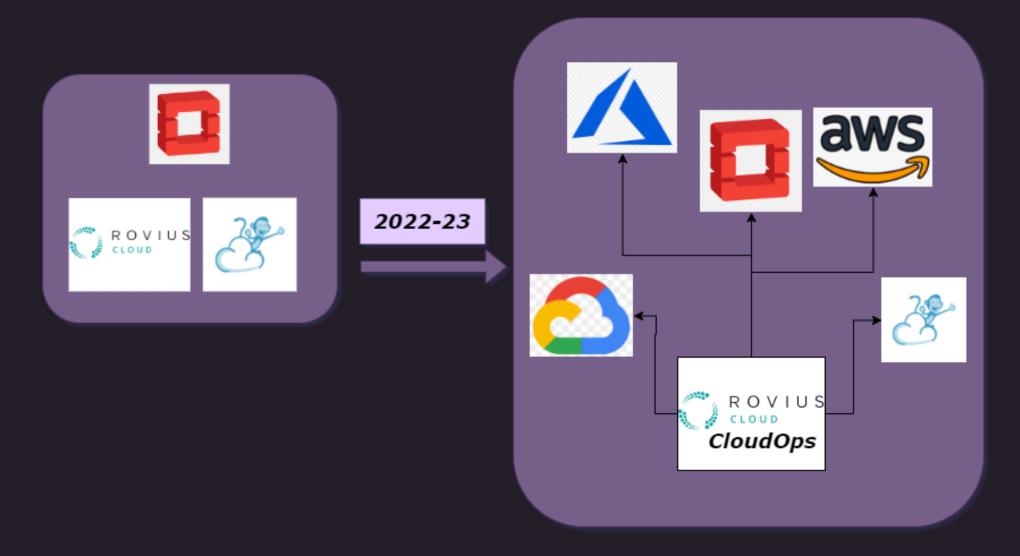
#### **Migration**

Migrate workloads within a multi-cloud environment

- Lift & Shift from physical servers, VMs or other clouds to any infrastructure
- Migration based on cost comparison between infrastructures.
- Modernize applications to use containers and micro services.
- Secure and scalable with minimal impact on production.



#### **Rovius with extended support for Multi Cloud**





# **Rovius Features & Roadmap**

#### **CloudOps - Roadmap**

#### In Place

- Provisioning based on Terraform template blueprints
- Supports Rovius CP, AWS, Azure, GCP
- Secrets Management -HashiCorp Vault
- \ IAM
- \ Org., Dept. & Projects
- Import existing cloud infrastructure

#### **By June 2022**

- Quota and Policy Management
- Cloud Cost Management
- \ Catalog Management
- Disaster Recovery & Migration
- Cloud Service Management
- Monitoring
- \ Approvals
- Alerts and Notifications
- \ Self Service

- Rapid Provisioning / Deprovisioning, highly scalable
- Custom template repository support for blueprints used to do provisioning in public cloud
- Comprehensive, large library of canned blueprints shipped with the product
- Salesforce and similar built-in Connectors available
- Easy integration with ticketing systems, helps service automation

#### ....Next

- **Kubernetes** workload orchestration
- Mobile device support for Ops
- Nation | Platform/Application
  - CI/CD Pipeline
  - iPaaS



#### Challenges

- Need to manage the containers deployed on a Kubernetes cluster from a console.
- \ Kubernetes cluster management should be cloud agnostic (should be the same for EKS and AKS).
- Should be able to monitor the lifecycle and performance of the applications deployed in containers on a given K8S cluster environment, in a cloud-neutral fashion.

#### **Solutions**

- Rovius CloudOps comes with a feature to manage K8S cluster in a cloud-agnostic fashion.

Extending support for K8s from CloudOps (MultiCloud) platform to do scale up / down on a given Kubernetes environment

Monitors the containers deployed on a given Kubernetes environment from the performance standpoint, collect and present stats back to the CloudOps Portal.

CloudOps Supports Service Mesh and Observability from its unified management console

#### **Outcomes**

#### **Effective Management**

Using this feature, apps and services deployed on containers over Kubernetes cluster are managed effectively from a single unified console.

#### **Performance Monitoring**

Container performance statistics are collected and reported in a periodical fashion for a given container thereby giving room for effective monitoring of performance.

#### Scale up / down & Service Mesh

Unified management console supports scaling up and down of container instances as well as managing a service mesh

#### **Rovius CloudPlatform - Roadmap**

#### 4.11.0.12

Tentative release - 2022.03

- OVA file management optimization (on Secondary storage)
- VR Wildcard SSL support for userdata and metadata
- Mac BigSur guestOS support, USB 3. 0 support
- Restrict access to ports 80/443/53 in a shared network
- MVC Cross vCenter migration of stopped VMs with attached disks
- Project Dashboard Capacity and resource utilization
- Option to add multiple pods with vLan option in dvSwitch
- vSphere 7.x support
- VM Migration across cluster for KVM
- Support for XS 8.2.1
- \ CloudStack
  - KVM Rolling maintenance
  - Enable additional configuration metadata to virtual machines

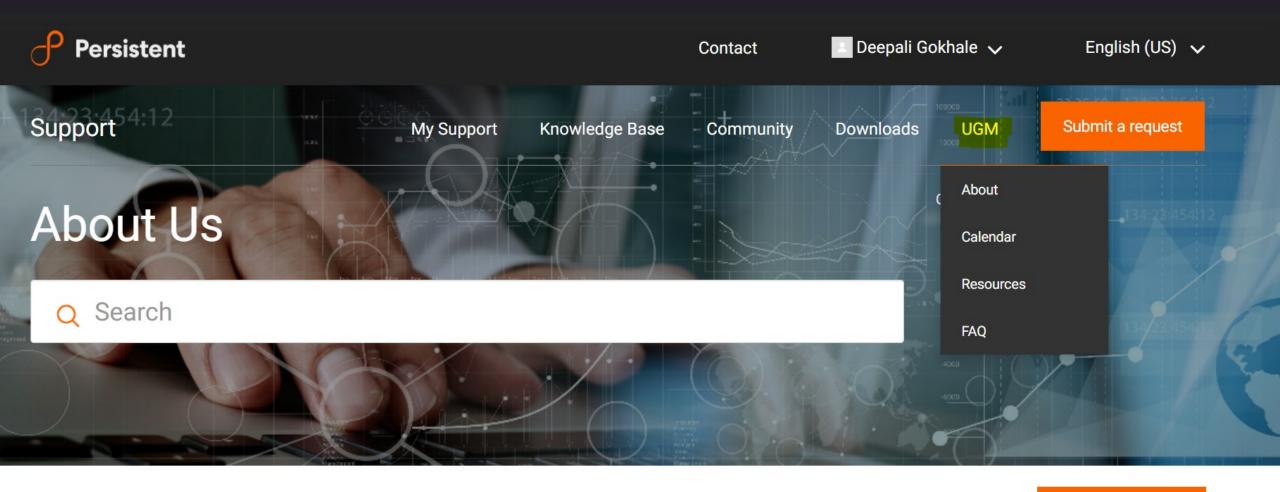
#### 4.15.0.1

Tentative release - 2022.06

- Add CPU weight as a parameter in deployVirtualMachine API
- Maintain history of redundant router state changes
- Maintain history of network id and public ip
- NTP configuration on CloudPlatform system VMs
- Network offering details UI to list shared networks
- \ Option to filter the public, management and storage ip ranges
- Option to use dynamicallyscalable function in RCP UI while registering ISO
- Bypass secondary storage for kvm offline volume migration
- CloudStack
  - Modern UI using vue.js\*
  - Support multile management network cidrs
  - Allow deploy Admin VMs and VRs in disabled zones/pods/clusters
  - Enable volume migration from shared mount point to nfs for kvm
  - Support for removing unused port groups on VMWare



#### **User Group Resources**



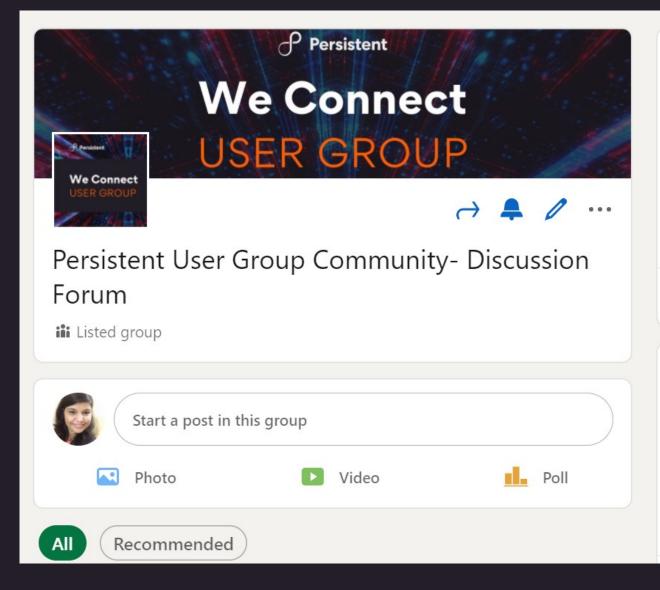
Persistent Support > UGM - About us > About Us

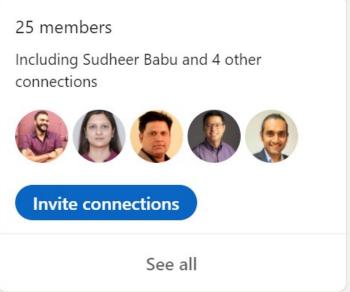
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This group is designed for Persistent users to connect to share insight and stay up-to-date on the latest product developments, releases, best practices, market, and other initiatives. Get exclusive early access to product information, news, releases and much more!

**Link** 





# **Question** & Answer

Let the discussion begin

