

Drilldown for each chart/tile



Nuvoloso

**Dashboard**-Volumes

- Summary
- Compliance
- Utilization
- Snapshots
- Replication

-Service Plans

- Summary
- Compliance
- Utilization

-Resources

- Summary
- Utilization

-Clusters

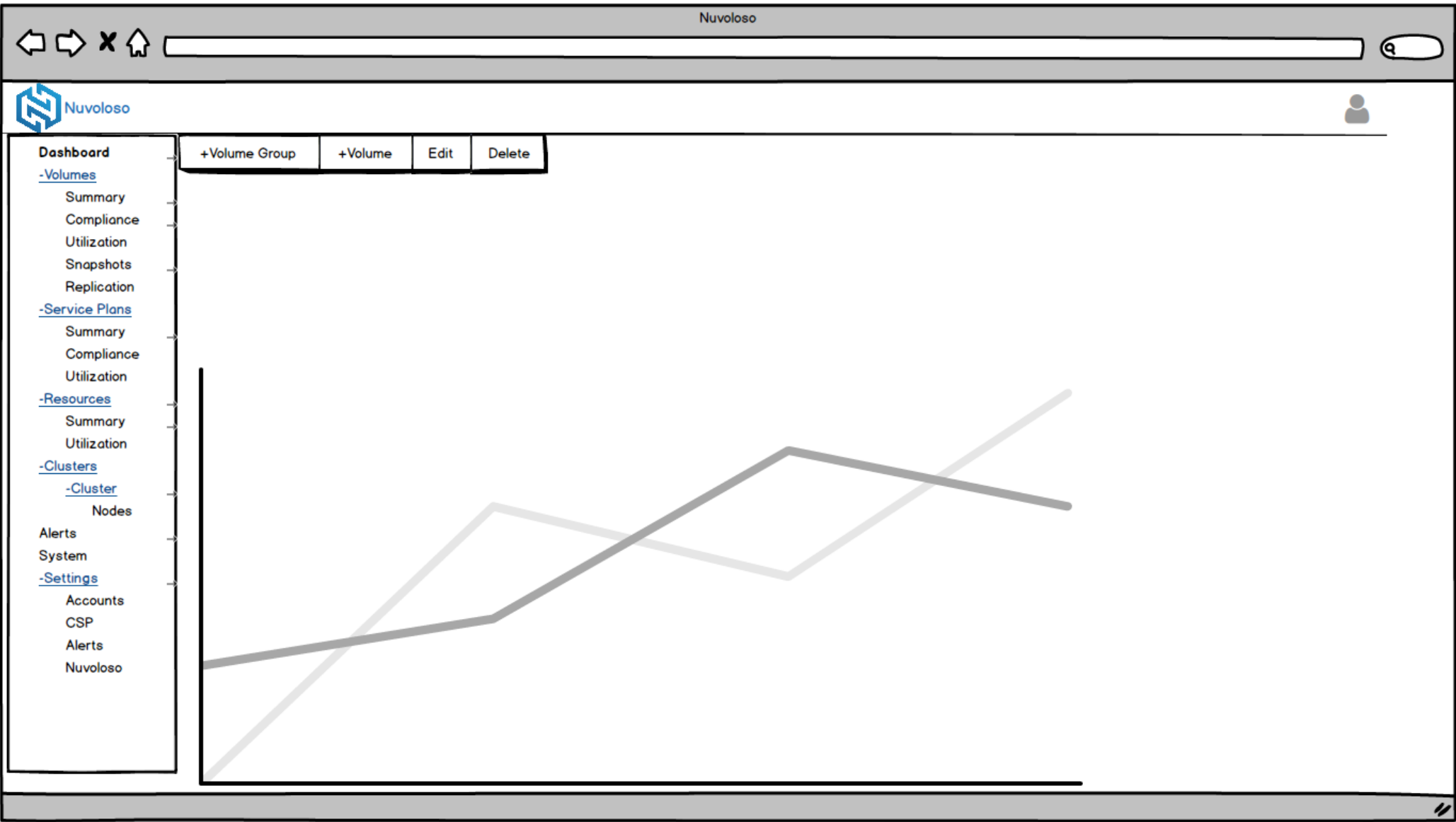
- Cluster
- Nodes

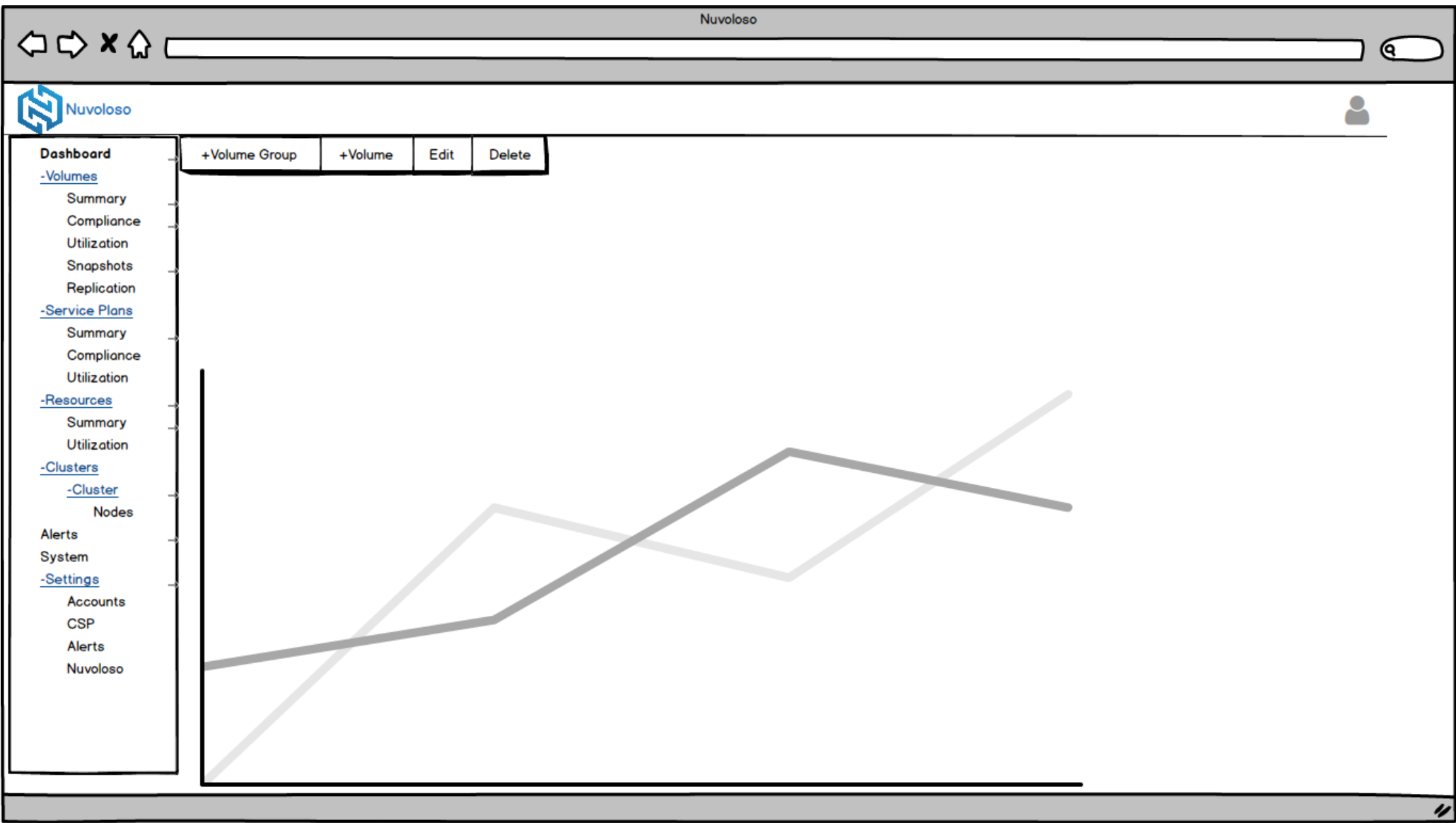
Alerts

System

-Settings

- Accounts
- CSP
- Alerts
- Nuvoloso





Nodes??? Location

What about volumes not in a group -- list first at top level ?

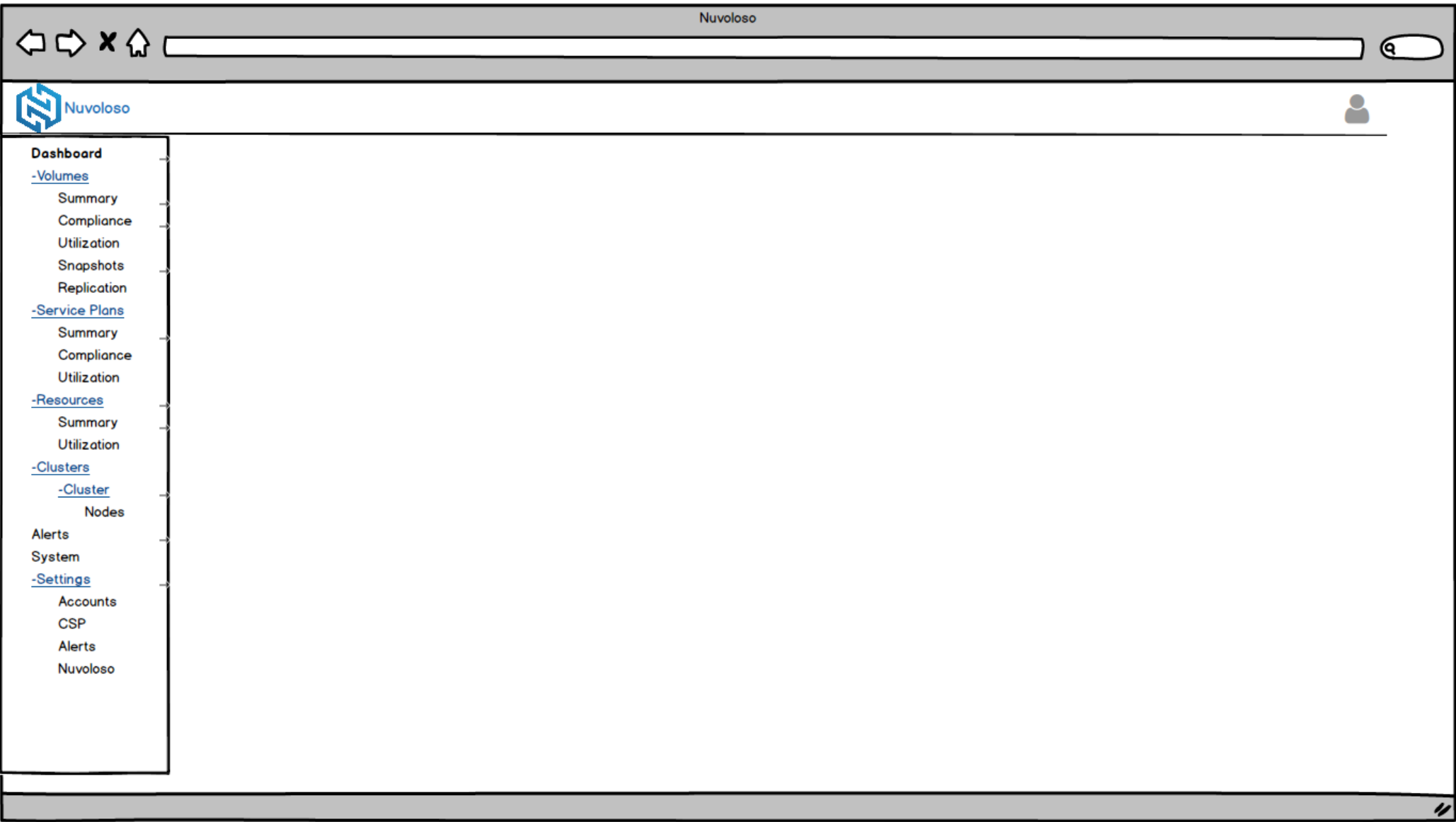
By application group

Manual vs. automatic provisioning?

adjust SPU's to adjust performance

Determined by selected volumes

Compliance



Service Plan Status


← → ✕ 🏠

http://

User views all SPs, can operate on them through a modal

status only shown for admin
Limited|Restricted|...

How does HeatMap look with little data -- does it scale as more data comes in over time?


 Nuvolos

Replication status?

remove capacity allocated

edit???

heat map chart



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Nuvolos

+Create

Edit

Delete

Change Status

Q filter

Name	Status	Capacity Used	Compliance	# Volumes	OK	Degraded	Error
Database Data	Published	89	23	OK	12	0	0
Database Logs	Published	42	42	OK	12	0	0
Web Server	Unpublished	12	11	Degraded	42	1	0
Old Web Server	Limited	2	9	OK	3	0	0
Database Data	Published	89	23	OK	12	0	0
Database Logs	Published	42	42	OK	12	0	0
Web Server	Unpublished	12	11	Degraded	42	1	0
Old Web Server	Limited	2	9	OK	3	0	0

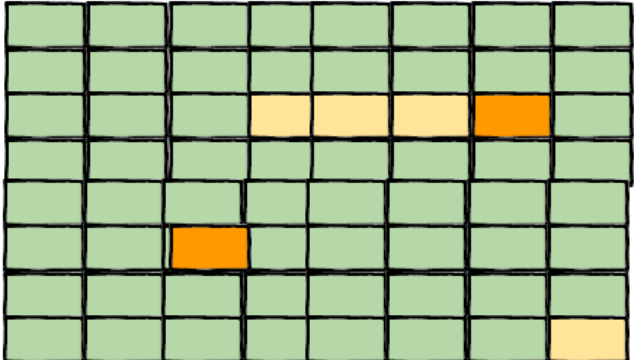
Service Level Objectives

SLO	Value
Response Time	2ms
Availability	99.99%
Security	Strong Encryption
RPO	1 hour

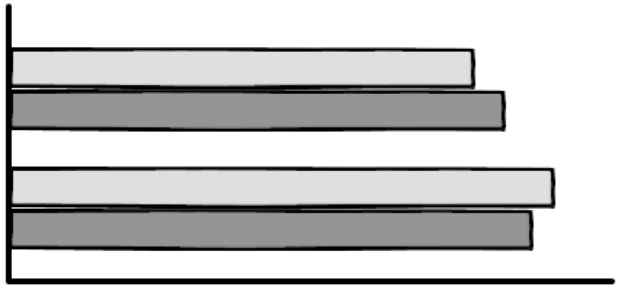
Account Restrictions

Account	Users
Eng	Dave, Carl
Accounting	Tad

Compliance Uage



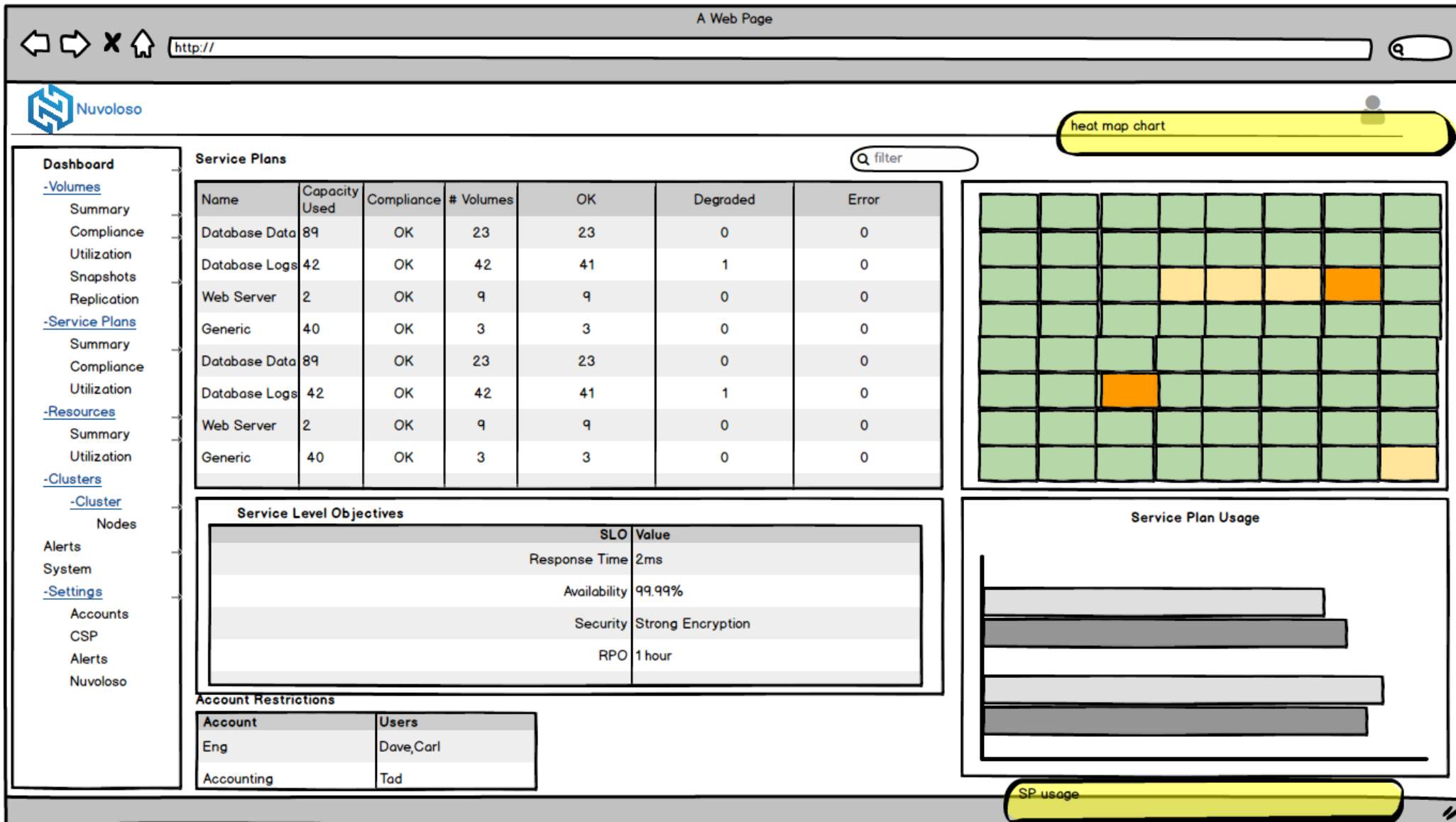
Service Plan Usage



SP usage

What are they and how much do I have of each? SP Table- What are they Summary- How many volumes have been created with that SP? Utilization- How much storage has been provisioned to that SP?

Service Plan Catalog (AA)



This is very similar to the Service Plan Summary for the Nuvo Admin

They will see all SPs available to them

They still need to see Status

- Published
- Limited -- no more volumes can be created with that SP



SP Configuration Wizard



Where do they see a summary of what each of the options is intended for -- mouse/flyover?
...or is it needed since the objectives are there

Welcome to the configuration wizard

On this page you will select a combination of production and protection options that suits your applications' needs.

Based on those selections, the software will indicate what the resultant service level objectives (SLOs) and cost to support them would be.

You will have the opportunity to adjust some of the SLOs on the next page to optimize your costs.

If you are replicating this service plan, you must select or create another service to replicate the data to.

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Name

Awesome SP

Service Plan Options

Production Options

- ☐ OLTP Data
- ☒ OLTP Logs
- ☐ Large object streaming
- ☐ Unstructured data lake
- ☐ Archive

Protection Options

- ☐ Database Data (Low RTO)
- ☒ Database Data (High RTO)
- ☐ Archive Data

☐ Replicated

Service Level Objectives

SLO	Value
Response Time	2ms
Availability	99.99%
Security	Strong Encryption
RPO	1 hour
Retention	30d

Service Plan Cost Info

Capacity Cost: \$ / GB 2\$/GB

Throughput Cost: \$ / MB 10\$/MB

Cancel Next

Compliance Options

Residency

us-west-2

Access

us-west-2

- User arrives at screen from Create
- User needs to enter Name
- User selects Production and Protection options
- => SLO values are updated based on the combination of the options
- => cost information is updated based on the combination of the options



SP Configuration Wizard - Tuning . or Edit



Nuvoloso

show which slos are editable



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[+Apply](#)[Cancel](#)

Name

Awesome SP

Expected Plan Usage

100GB

Service Level Objectives

SLO	Value	
Response Time	2ms	
Availability	99.99%	
Security	Strong Encryption	
RPO	1 hour	
Retention	30d	

Service Plan Cost Info

Capacity Cost: \$ / GB 2\$/GB

Throughput Cost: \$ / MB 10\$/MB

End User Cost: \$ / MB 12\$/MB

[+Edit](#)

Account and/or User Access

Account	Users
Eng	Dave, Carl
Accounting	Tad

[Restrict to](#)

How much of this service plan could be provisioned based on expected

Potential Resources Required

Ephemeral

EBS GP2

S3

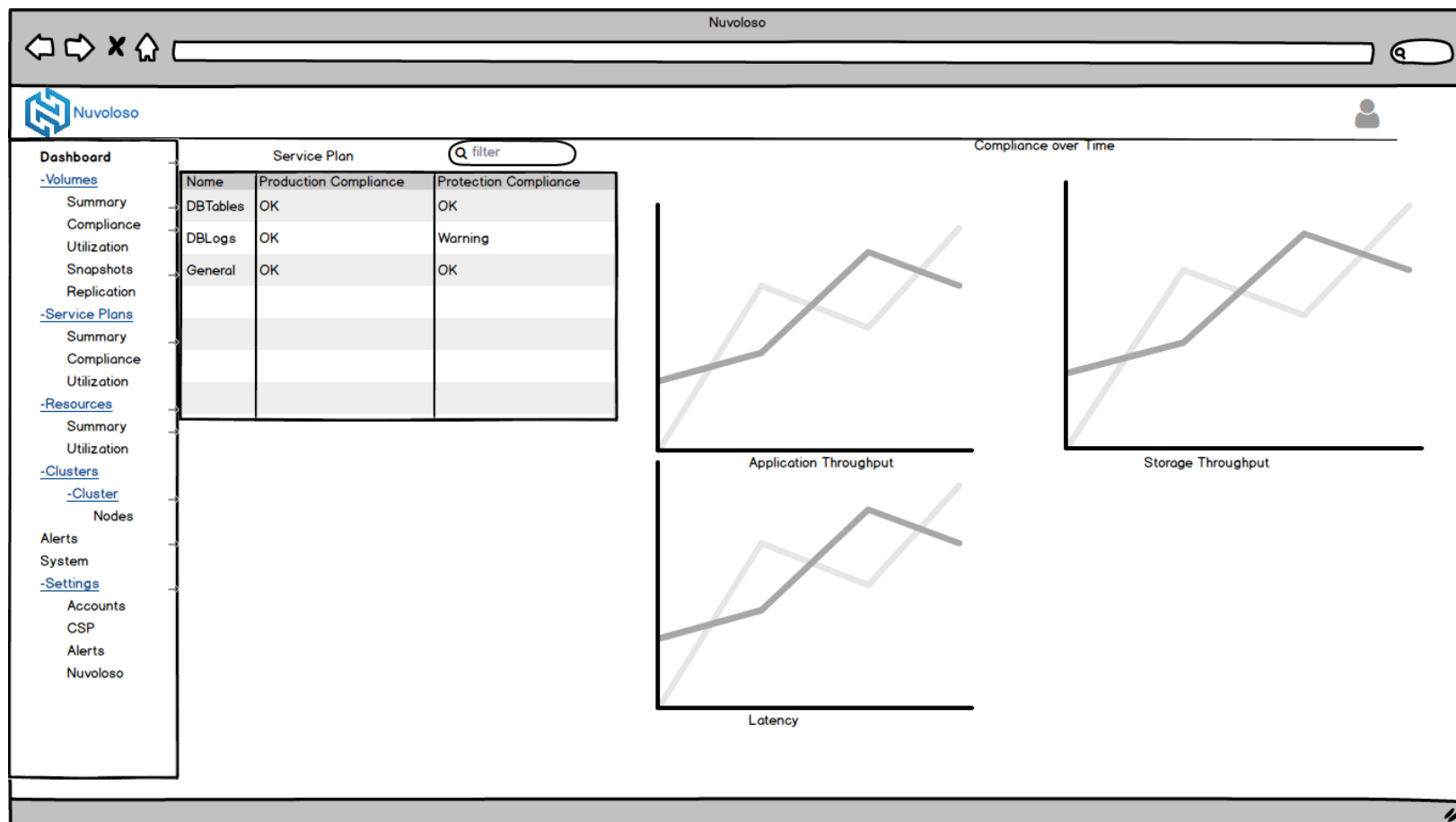
Resources Available

Ephemeral

EBS GP2

Disk

S3



Side by side or overlaid

Select a plan and see it's statistics over time

How are they performing?

Compliance

Chart -- Overall compliance trend over time
Filter on chart? What if everything hovers around 100%? Show Violation % instead of compliance %

Table -- Compliance table that is sortable by % violation | compliant for all SLOs

Compliance view (current) by all/volume group/volume

Compliance view (trend) by all/volume group/volume

Compliance view (application) by volume group

Compliance view (devices/resources) by volume group (or individual device??)

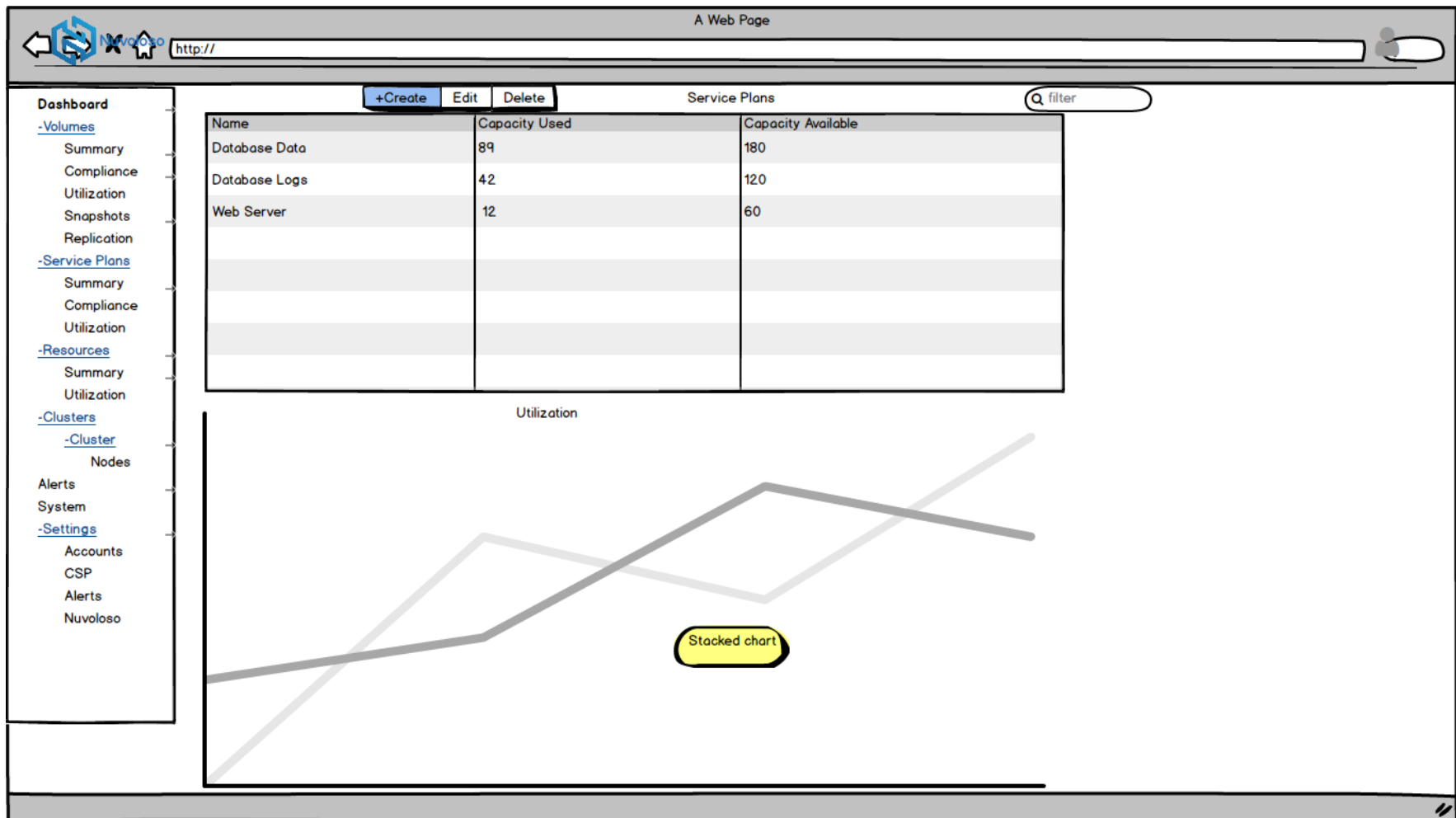
Allocated by cluster???

Details Chart should show

Latency measured by SLO

Bandwidth measured by SLO

Against the targets?



Utilization by SP, charts by SP, any global summary?

[Which page?]

Utilization of storage allocated by SP -- useful to determine if storage resources for a SP will need to be increased ==> need breakdown of capacity by type for the SP? Likely

Allocated by cluster and volume group?



SP Configuration Wizard (Replication selected)



Welcome to the configuration wizard

On this page you will select a combination of production and protection options that suits your applications' needs.

Based on those selections, the software will indicate what the resultant service level objectives (SLOs) and cost to support them would be.

You will have the opportunity to adjust some of the SLOs on the next page to optimize your costs.

If you are replicating this service plan, you must select or create another service to replicate the data to.

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Replication - user chooses source

Services

Used for dynamic provisioning

Name

Awesome SP

Service Plan Options



Production Options

☐ OLTP Data

☒ OLTP Logs

☐ Large object streaming

☐ Unstructured data lake

☐ Archive

Protection Options

☐ Database Data (Low RTO)

☒ Database Data (High RTO)

☐ Archive Data

☒ Replicated

Source of Data -- Service Plan

DatabaseService

Service Level Objectives

SLO	Value
Response Time	2ms
Availability	99.99%
Security	Strong Encryption
RPO	1 hour
Retention	30d

Service Plan Cost Info

Capacity Cost: \$ / GB 2\$/GB

Throughput Cost: \$ / MB 10\$/MB

Cancel Next

Nuvoloso

The graph displays two data series over an unspecified time period. The dark grey line begins at a low value, increases to a peak, and then decreases. The light grey line starts at the origin, rises to a peak, dips slightly, and then rises again to a higher peak.

Select one or more to see utilization charts over time

Nuvolosio

Nuvolosio

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Nuvolosio

Storage Provisioner / Resource Pool - Create

Create Storage Pool

Name

CSP Domain

AWS-1

Storage Type

GP2

S3

Maximum Capacity

Description

User provided text to describe storage

Tags

Key

Value

One

A

Two

B

☒ Enabled

Cancel

Submit

Open Questions: Cost?

Dialog for tag mgmt? Consistent across all resources



Storage Provisioner / Resource Pool - Edit

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Create Storage Pool

Name

CSP Domain AWS-1

Storage Type GP2

Maximum Capacity 100GB *If you need to change the capacity for the resource pool, please return to the summary page and select "Modify Capacity" (or click [here](#))*

Description

Tags

Key	Value
One	A
Two	B

☒ Enabled

Cancel Submit

Editing is limited

Cannot change the CSP Domain, Storage Type

Use a separate page to modify capacity



Storage Provisioner / Resource Pool - Modify Capacity

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Modify Capacity

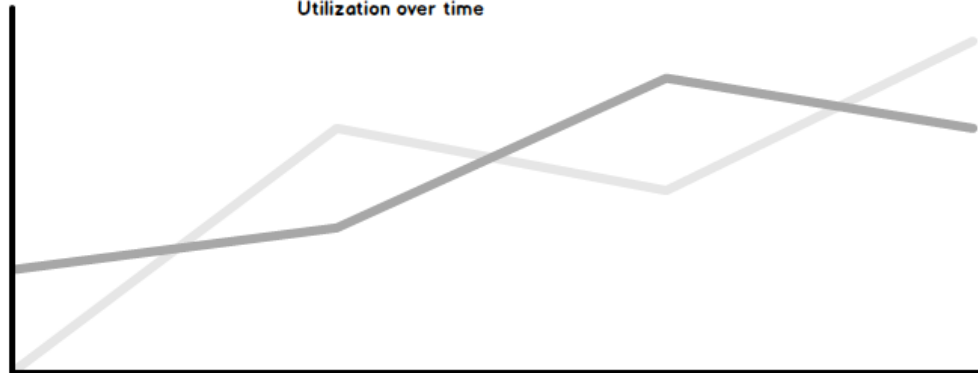
Name GP-2
CSP Domain AWS-1
Storage Type GP-2
Description Higher performing SSD storage

Current Maximum Capacity 100GB

New Maximum Capacity

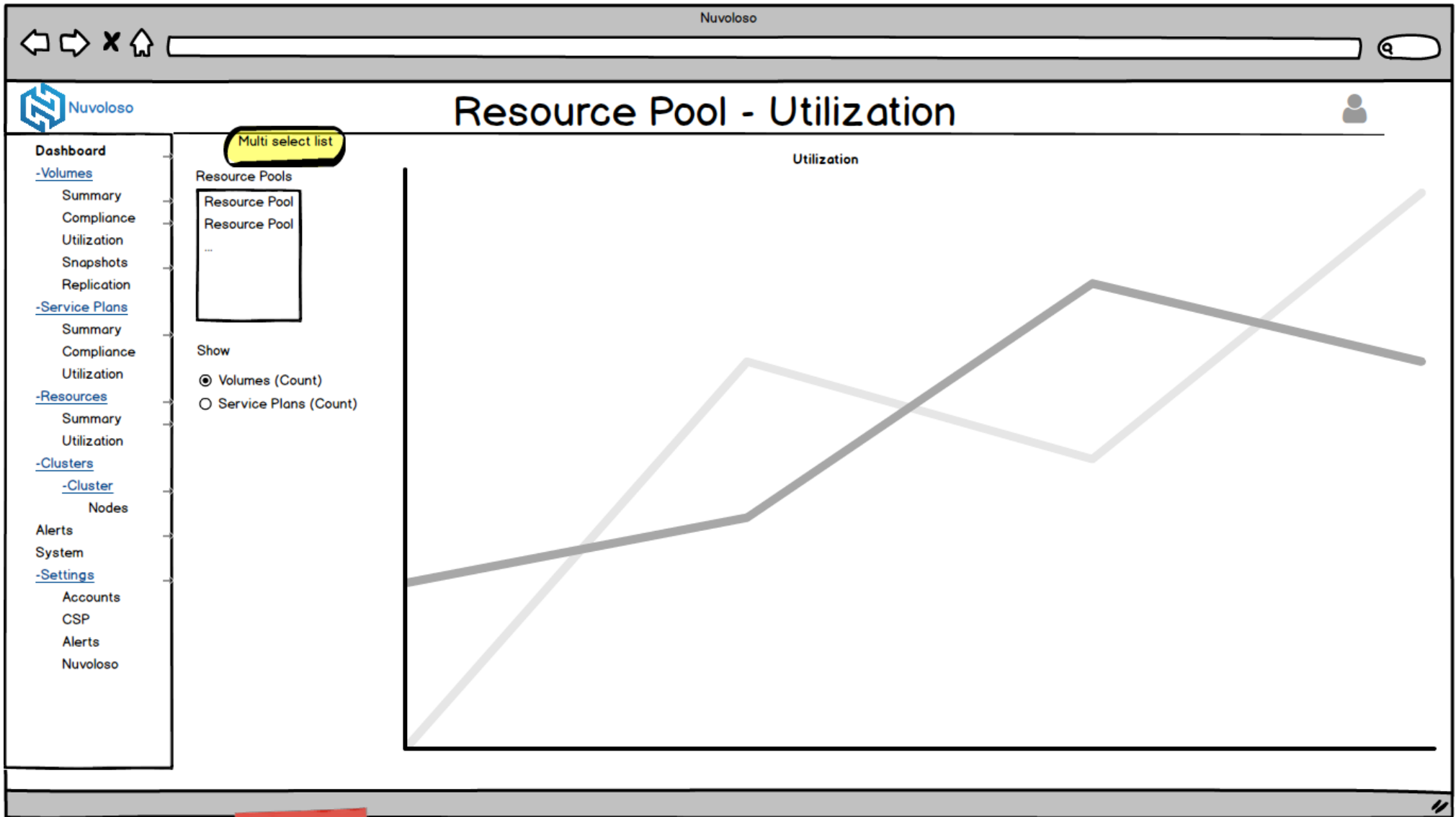
Impact statement?

Utilization over time



Cancel

Submit



What mappings from pool > volumes > etc need to be done

Number of volumes overlaid on utilization?

Compliance history for service plans in use?

http://

q

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Alerts page

Historical view of alerts in table
Filtering/etc

Alert management -- dismiss



Clusters

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+Create Edit Delete

Name	CSPDomain	Details <>
DC1	AWS-1	lots of information on ... something
DC2	AWS-2	lot of information on ... something else

[Generate YAML](#)
Validate configuration

mechanism to generate configuration needed for deployment--just K8S specific?

Nodes

Q search

Name	Status	# Volumes	Capacity Used
Node1	OK	4	120
Node2	OK	13	78
Node3	OK	7	54
Node4	OK	22	43

Indicator for flex volume installation status

click through to volumes page



Cluster Create



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Name

CSPDomain

K8S user

K8S id

K8S key

Provide K8S credentials so Nuvoloso can manage your environment.

Zones

Cancel Submit

TBD

Limit zones here?????

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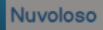
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Admin
Application admin
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Alert mechanisms
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Nuvoloso

Name	Cloud Provider	Clusters	Details <>
		<div> List or link to clusters created for CSPDomain </div>	<div> CSP specific information...AWS -- key id, zone </div>



Nuvoloso

Submit

How will onsite resources be configured?



http://

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