CXS1772BCN

vmware EXPLORE

Enhancing Neurodiversity and Functionality for an Inclusive User Interface

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Required Disclaimer

- This presentation may contain product features or functionality that are currently under development.
- This overview of new technology represents no commitment from VMware to deliver these features in any generally available product.
- Features are subject to change, and must not be included in contracts, purchase orders, or sales agreements of any kind.
- Technical feasibility and market demand will affect final delivery.
- Pricing and packaging for any new features/functionality/technology discussed or presented, have not been determined.

Agenda

Speaker’s Introduction

Psychology Of Design

Understanding Colour Blindness: A Comprehensive Overview

Colour Blindness And IT Accessibility

VMware NSX: An inclusive User Interface

Presenters

Aditya Mukherjee

Group Product Line Manager

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Psychology of Design

Cognitive biases & principles that affect UX

Introduction to UX

Understanding User Experience (UX)

Definition: UX stands for User Experience. It's how a person feels when interacting with a product or service.

Roots in Human Psychology: Good UX understands and meets the user's needs, motivations, and behaviors. It's rooted in cognitive psychology, studying how humans interact with product interfaces.

UX vs UI: While UX is about the overall feel of the experience, UI (User Interface) is about the specific assets users interact with. Both are crucial.

Psychology of Design

Cognitive biases & principles that affect UX design

Category	Bias & Principle
Information	Confirmation Bias: looking for evidence that confirms what you think Priming: previous stimuli influencing a user's decision Empathy Gap: emotions influence user behavior
Meaning	Curiosity Gap: desire to seek out missing information Mental Model: preconceived opinion of how things work Familiarity Bias: prefer familiar experiences
Time	Decision Fatigue: too many decisions lowers users' ability to make rational ones Pareto Principle: 80% of the effects come from 20% of the causes IKEA effect: user created objects are valued more
Memory	Sensory Appeal: engage more with things appealing to multiple senses Chunking: People remember grouped information better Delighters: remember more unexpected and playful pleasures

Accessibility

Accessibility

Accessibility in UX Design

Equal Access & Opportunity:

- All users get equal access to digital content and features, ensuring no one faces barriers due to different abilities.

Broader Audience Reach:

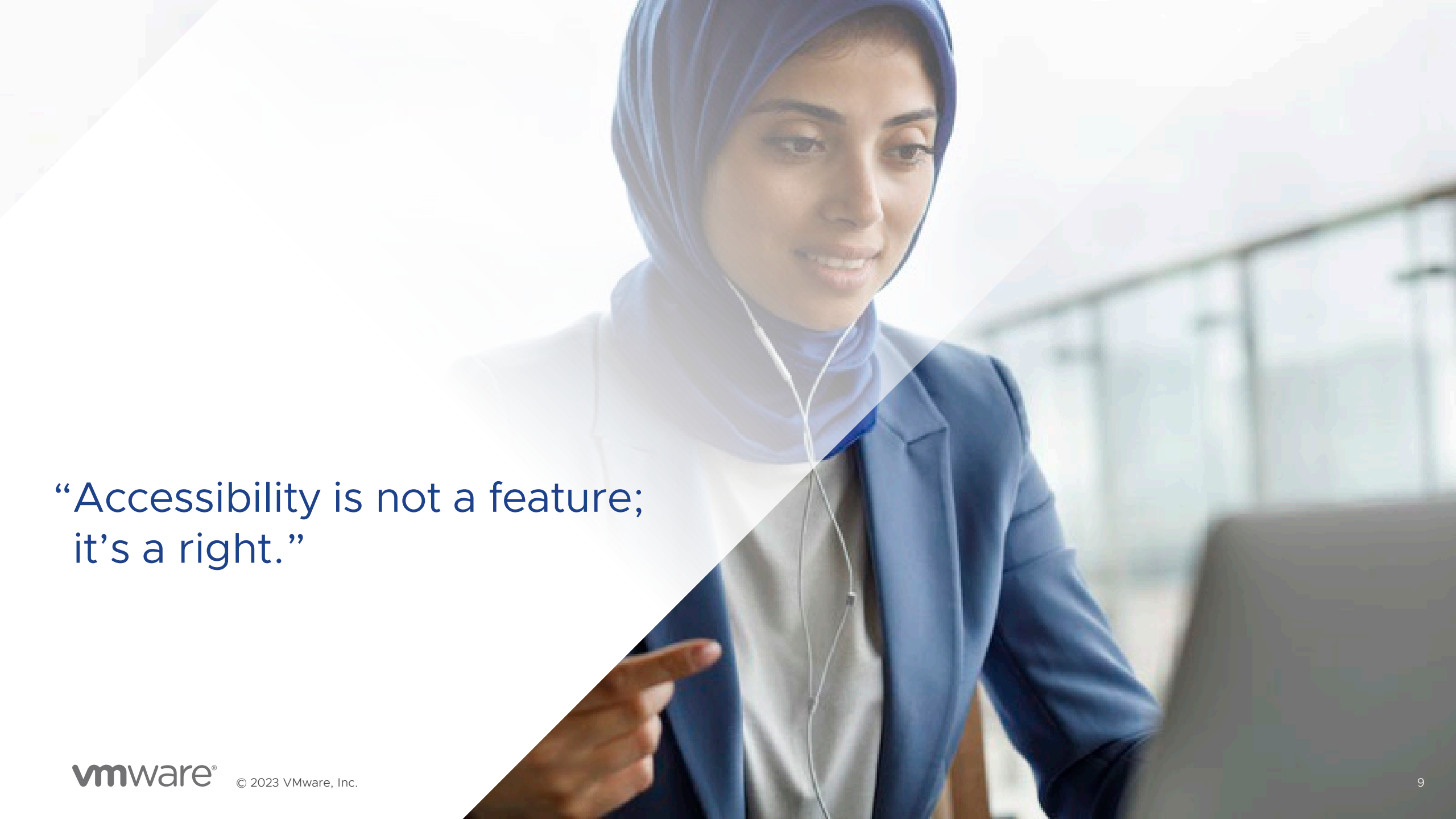
- Making products accessible not only reaches people with disabilities but also benefits groups like the elderly with potential limitations in motor skills or vision.

Enhanced Usability:

- Enhances usability for all. Features like subtitles, created for the deaf, are now used in various scenarios, from noisy places to language learning.

Economic Benefits:

- Broadens user reach and potential revenue while also saving costs by preventing future fixes and reducing legal liabilities.



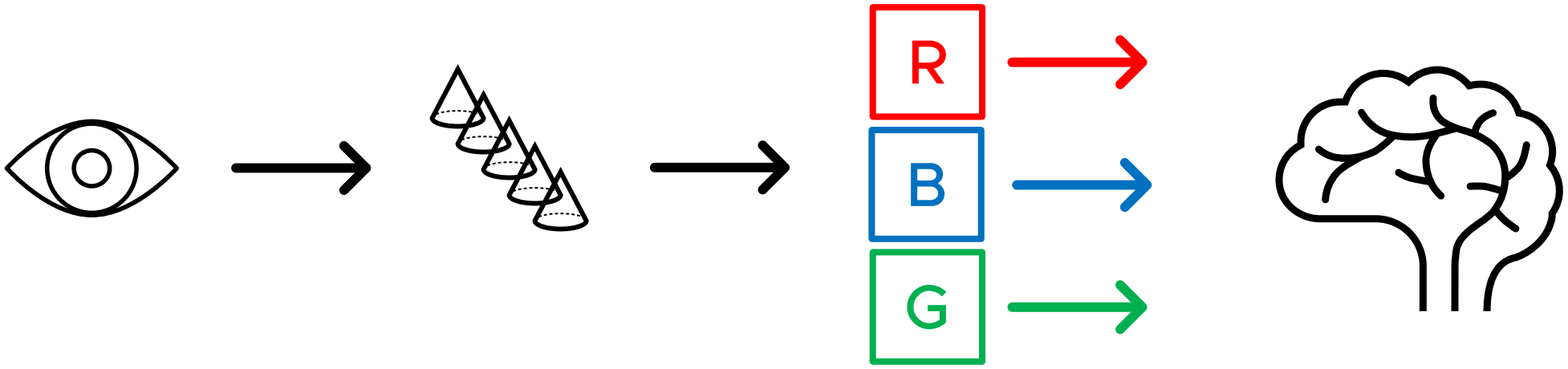
“Accessibility is not a feature; it’s a right.”

Understanding Colour Blindness: A Comprehensive Overview

An In-Depth Exploration of Types, Causes, and Daily Challenges

Colour Blindness (Daltonism) - An Overview

Brief introduction to colour blindness



Eye and Retina

Cones

Red / Blue / Green

Brain

Colour Blindness (Daltonism) - An Overview

Spot the 7 Differences (Protanopia) !

Normal Vision or Trichomacy

Protanopia (Reduce Sensitivity to Red Light)

Colour Blindness (Daltonism) - An Overview

Spot the 7 Differences (Deuteranopia) !

Normal Vision or Trichomacy

Deuteranopia (Reduce Sensitivity to Green Light)

Colour Blindness (Daltonism) - An Overview

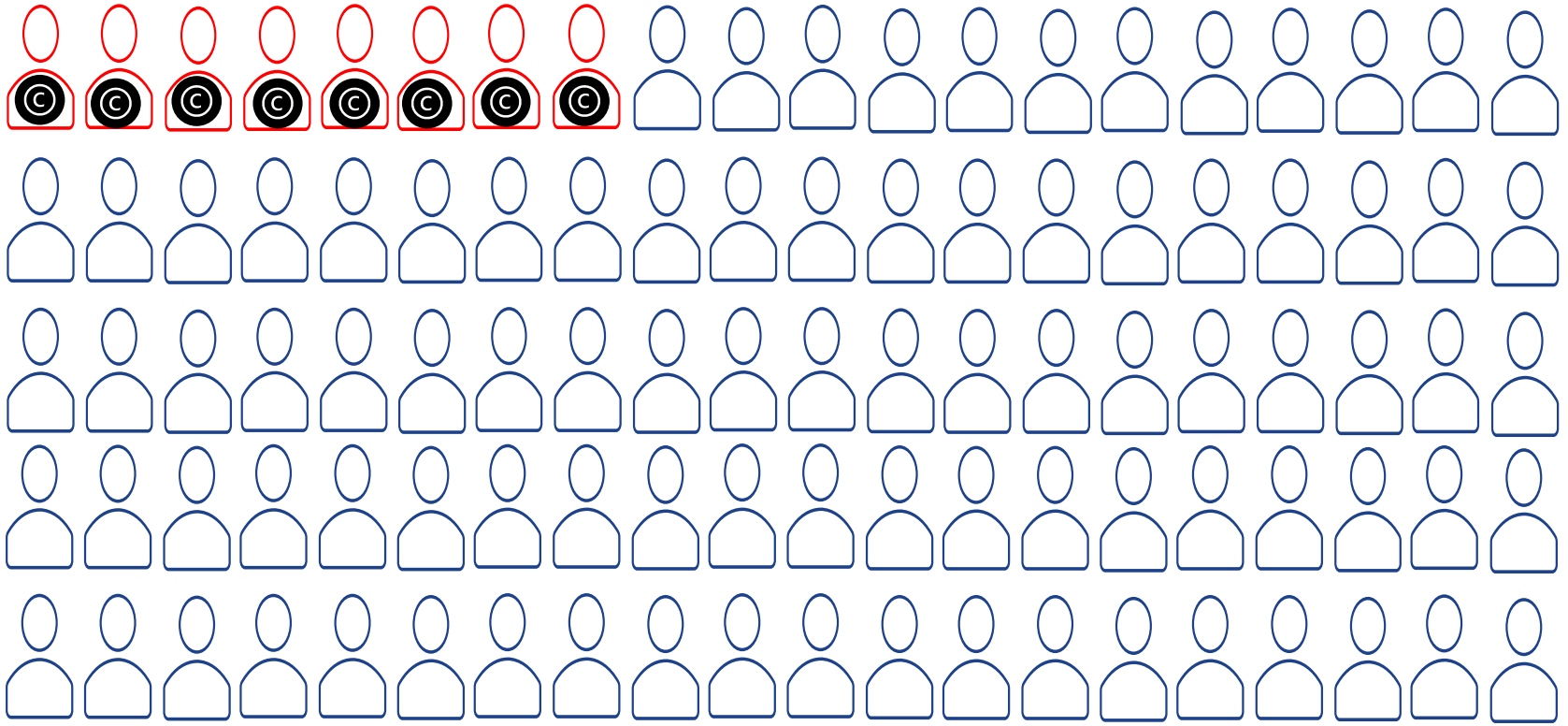
Spot the 7 Differences (Tritanopia) !

Normal Vision or Trichomacy

Tritanopia (Reduce Sensitivity to Blue Light)

Colour Blindness (Daltonism) - An Overview

Colour Blindness Prevalence Statistics

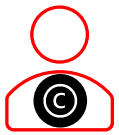


Red-Green Colour Blindness (Protanopia and Deuteranopia):

- Affects approximately 8% of men of Northern European descent.
- Affects about 1% of women of the same population.
- Prevalence varies among different ethnic groups and regions.

Blue-Yellow Colour Blindness (Tritanopia):

- Less common than red-green colour blindness.
- Estimated prevalence typically ranges from 0.01% to 0.03%.



Colour Blind Vision

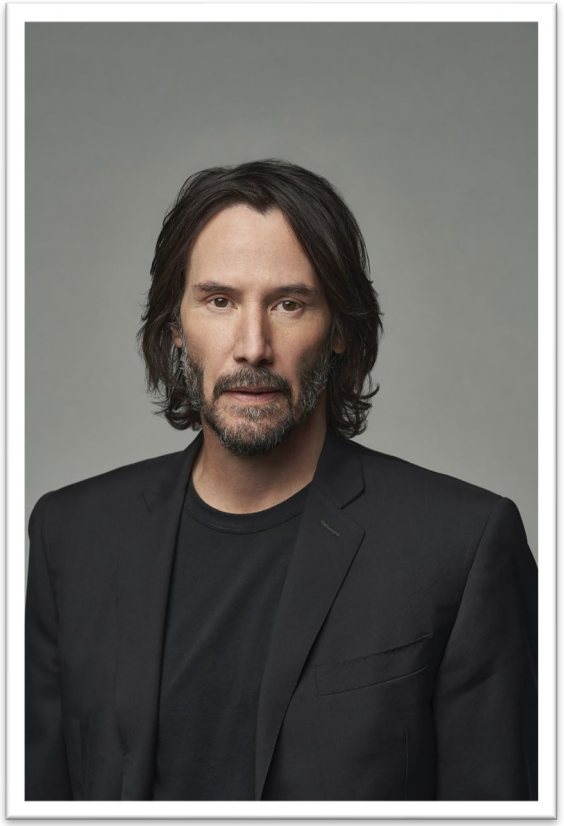
Normal Vision

Total Colour Blindness (Monochromacy):

Estimated to occur in fewer than 1 in 33,000 individuals.

Colour Blindness (Daltonism) - An Overview

[Colour] Blind Test



Colour Blindness and IT Accessibility

Raising Awareness to help with daily challenges

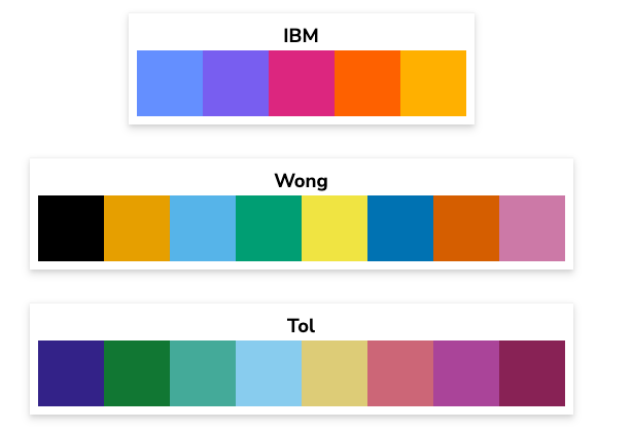
Colour Blindness And IT Accessibility

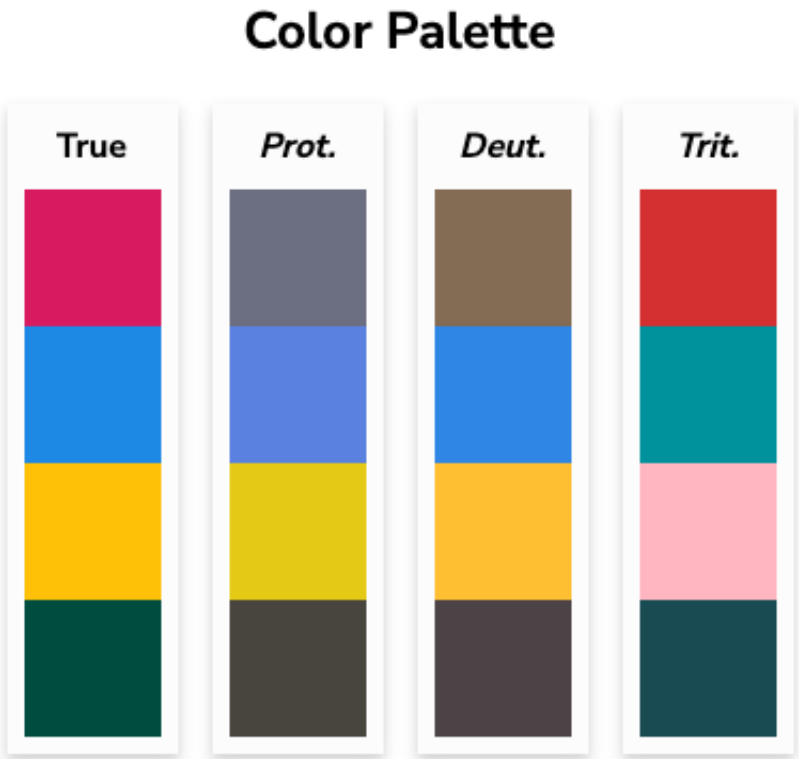
Colours, Contrast and more

Use High Contrast Colours:

- Text and background colours
- Colour choices

Other Colour Palettes exist:





Colour Blindness And IT Accessibility

Hyperlinks

Randomness is the lack of pattern or predictability in events, and it's present in everything from the movement of particles to the outcomes of a coin toss. While randomness can sometimes be beneficial, it can also be frustrating or dangerous. Despite its sometimes negative consequences, randomness is an inherent part of our world and can even be a source of beauty and creativity in nature and the arts.

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Colour Blindness And IT Accessibility

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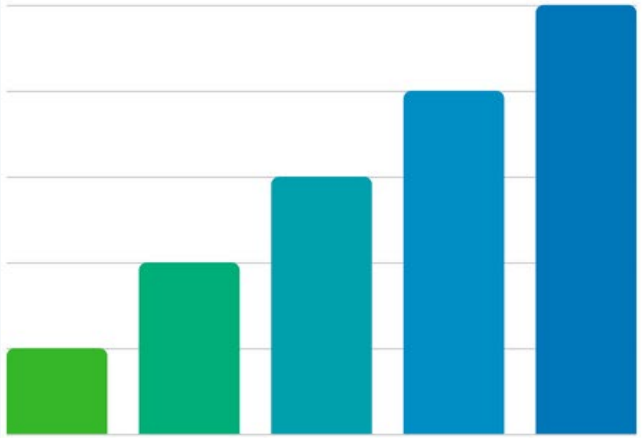
Colour Blindness And IT Accessibility

Colours, Contrast and more

Avoid relying solely on Colour:

- Not as only means to convey information
- Use instead Labels, patterns

Normal Vision



Colour Blind Vision

Colour Blindness And IT Accessibility

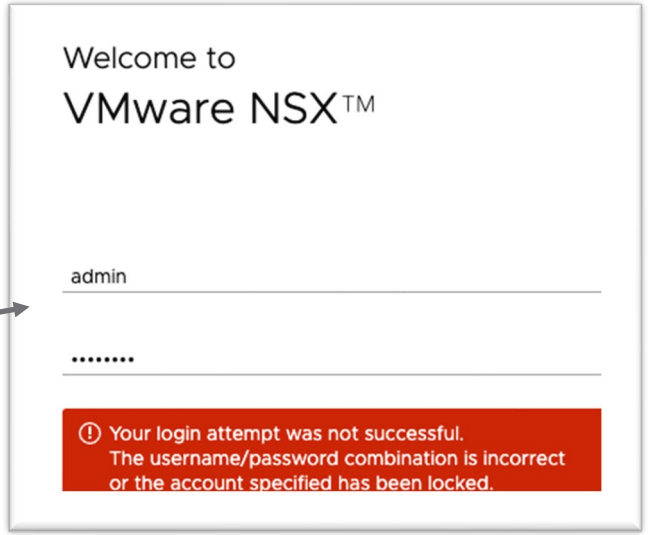
Colours, Contrast and more

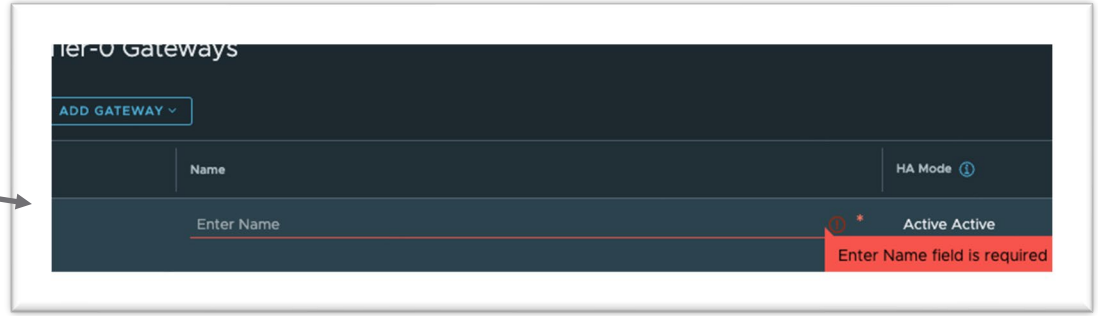
Use Symbols and Icons:

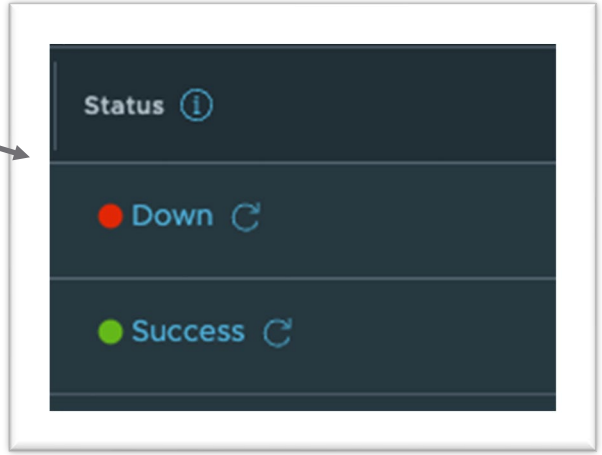
- Not only a colour

On NSX Tier 0/1 creation

On NSX objects Status





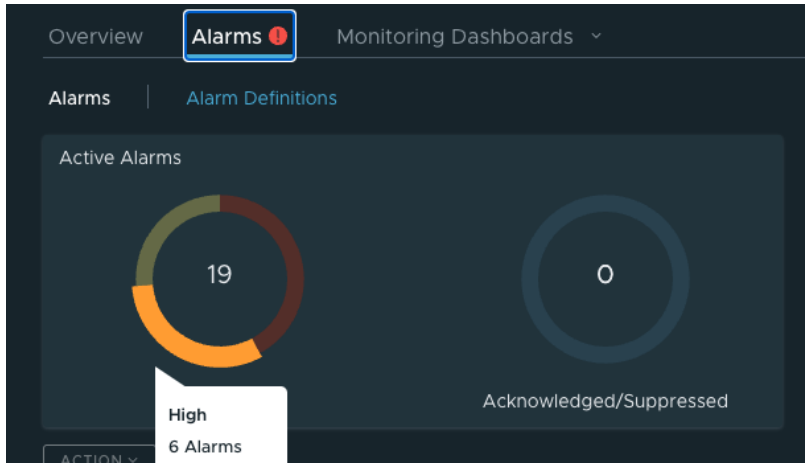


VMware NSX: An inclusive User Interface

A closer look at the Product

VMware NSX: An Inclusive User Interface

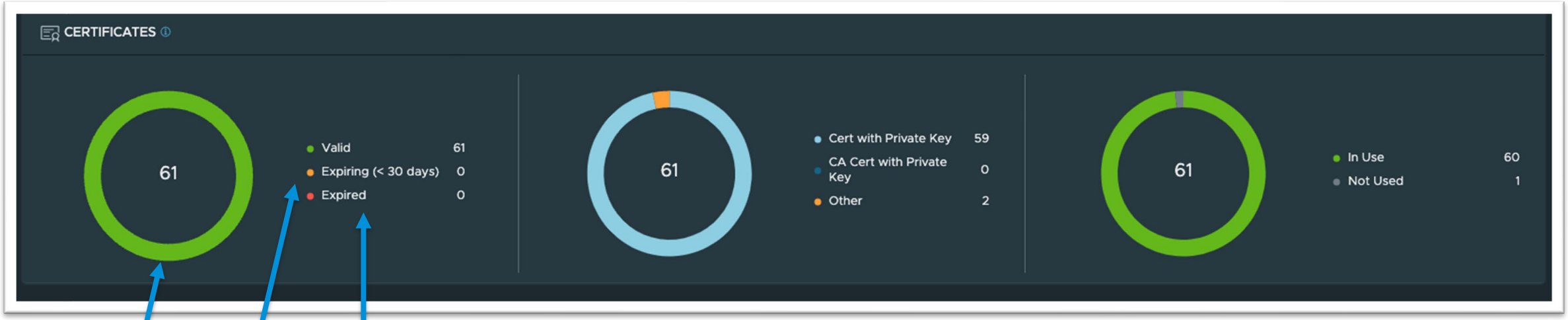
Alarms and Events



Active Alarms with highlights

VMware NSX: An Inclusive User Interface

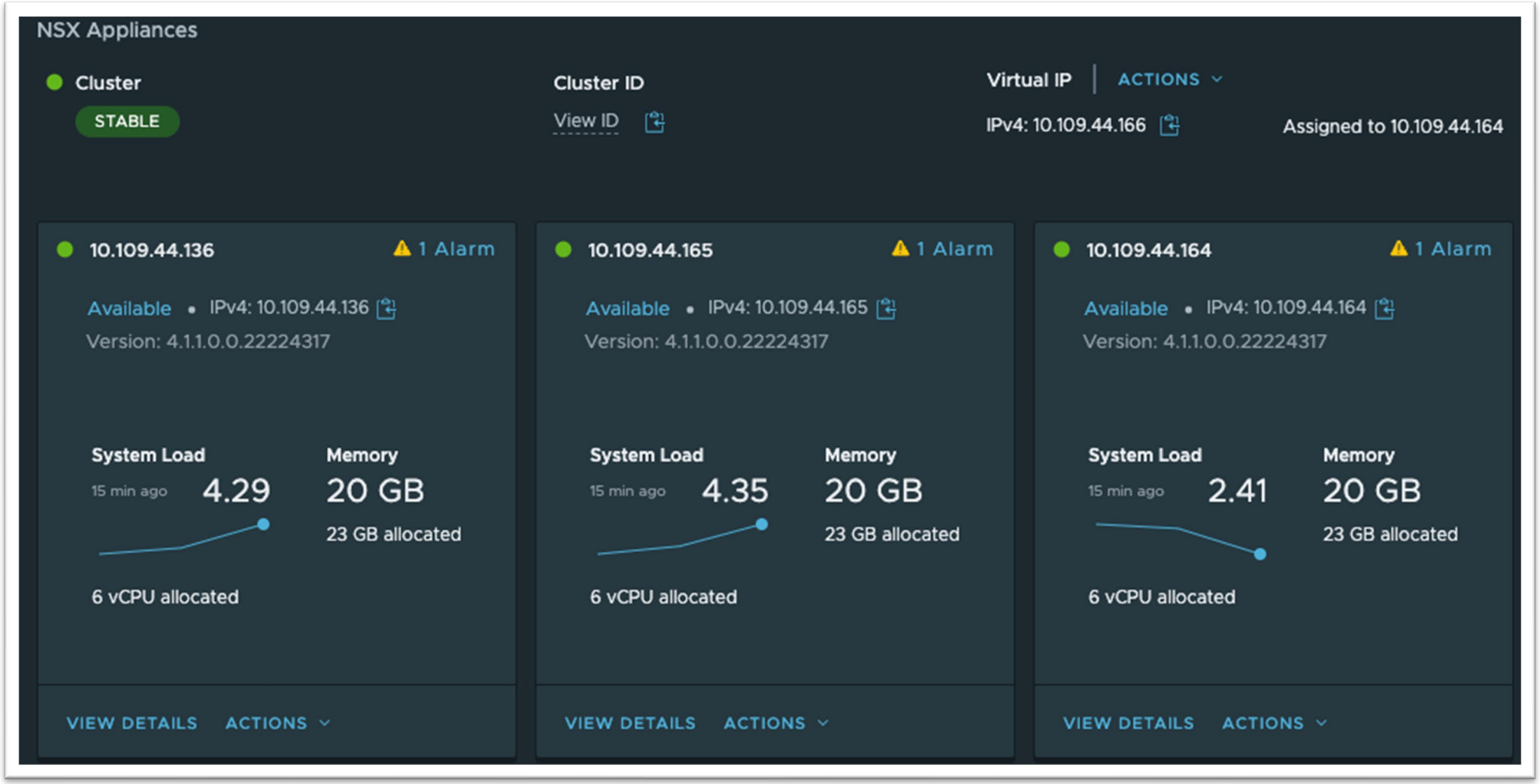
Certificate Dashboards



Charts Colour Legends

VMware NSX: An Inclusive User Interface

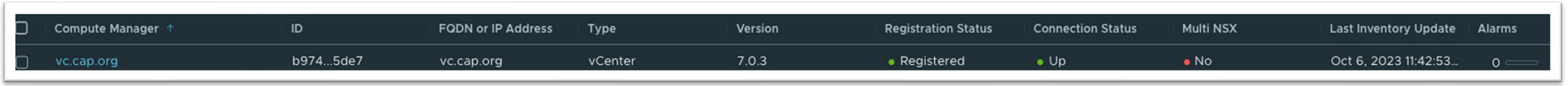
NSX Appliances Overview



VMware NSX: An Inclusive User Interface

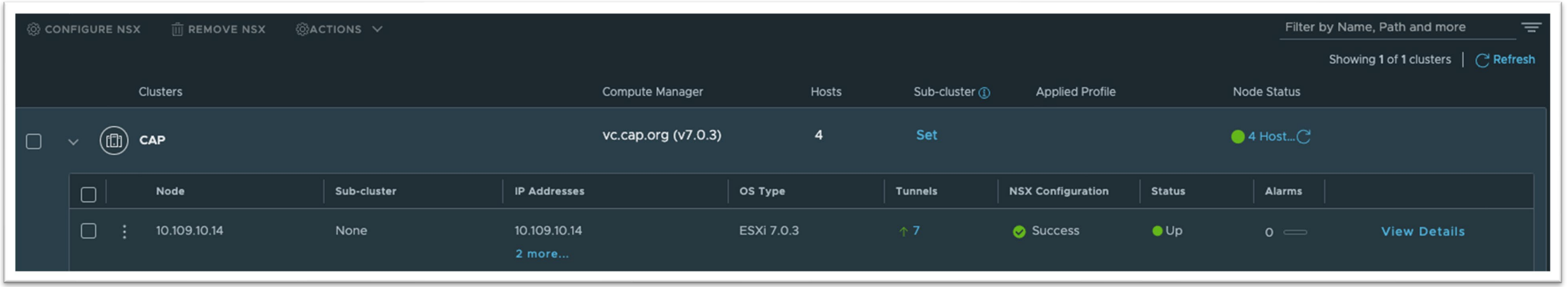
NSX Transport Node and Compute Manager

Compute Manager registration



Compute Manager	ID	FQDN or IP Address	Type	Version	Registration Status	Connection Status	Multi NSX	Last Inventory Update	Alarms
vc.cap.org	b974...5de7	vc.cap.org	vCenter	7.0.3	Registered	Up	No	Oct 6, 2023 11:42:53...	0

ESXi Host Transport Nodes



CONFIGURE NSX | REMOVE NSX | ACTIONS | Filter by Name, Path and more

Showing 1 of 1 clusters | Refresh

Clusters	Compute Manager	Hosts	Sub-cluster	Applied Profile	Node Status
CAP	vc.cap.org (v7.0.3)	4	Set		4 Host...

Node	Sub-cluster	IP Addresses	OS Type	Tunnels	NSX Configuration	Status	Alarms	
10.109.10.14	None	10.109.10.14 2 more...	ESXi 7.0.3	7	Success	Up	0	View Details

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Thank You