Azure Stack HCI 23H2 Deployment

Manfred Helber

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THOMAS KRENN

Manfred Helber

Themen heute

Das Deployment ändert sich mit Azure Stack HCI 23H2 grundlegend! So wird nun das Azure Portal für das Deployment der azure Stack HCI Lösung genutzt. Der Microsoft Most Valuable Professional Manfred Helber erklärt in diesem Webcast was bei der Hardware-Auswahl für Azure Stack HCI zu beachten ist und wie das Deployment von Azure Stack HCI 23H2 genau abläuft.

Inhalte in diesem Webcast:

- **Zertifizierte Systeme von Thomas-Krenn für Azure Stack HCI**
- **Vorbereitungen für das Deployment von Azure Stack HCI 23H2**
- **Cloud-based Deployment für Azure Stack HCI 23H2**

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Die nächsten Termine

28.02. 10:00 Uhr Termin 3: Azure Stack HCI 23H2 VM Workloads verwalten

Bei Azure Stack HCI 23H2 gibt es umfangreiche Neuerungen im Bereich des VM-Managements über das Azure Portal. In diesem Webcast zeugt der Microsoft Most Valuable Professional Manfred Helber wie das VM-Management über das Azure Portal für Azure Stack HCI 23H2 funktioniert und welche Möglichkeiten sich daraus ergeben.

Inhalte in diesem Webcast:

- Die Rolle der Azure Arc Ressource Bridge für das VM-Management
- VM-Images und Logische Netzwerke verwalten
- Virtual Machines verwalten

Die nächsten Termine

07.03. 10:00 Uhr Termin 4: Azure Stack HCI 23H2 hybride Services nutzen

Mit Azure Stack HCI war von Beginn an die Nutzung von hybriden Services ein wichtiges Thema. Mit Azure Stack HCI 23H2 gibt es nun einige Neuerungen und Erweiterungen im Bereich der hybriden Services. Der Microsoft Most Valuable Professional Manfred Helber zeigt in diesem Webcast die Nutzung der wichtigsten hybriden Services für Azure Stack HCI.

Inhalte in diesem Webcast:

- Monitoring für Azure Stack HCI konfigurieren
- Windows Admin Center über Azure nutzen
- Updates für Azure Stack HCI verwalten

20.03. 10:00 Uhr Termin 5: Azure Stack HCI 23H2 und Azure Virtual Desktop (AVD)

Azure Virtual Desktop ist einer der Azure Services auf Azure Stack HCI zu welchem es eine enorme Nachfrage gibt. Das liegt sicher daran, dass sich durch AVD mit modernen Technologien klassische RDS-Szenarien ablösen lassen. In diesem Webcast zeigt der Microsoft Most Valuable Professional Manfred Helber wie sich AVD auf Azure Stack HCI bereitstellen lässt und wie die User-Experience aussieht.

Inhalte in diesem Webcast:

- Azure Virtual Desktop Grundlagen und Rahmenbedingungen
- Azure Virtual Desktop auf Azure Stack HCI bereitstellen
- Azure Virtual Desktop auf Azure Stack HCI – User Experience

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Themen heute

- **Zertifizierte Systeme von Thomas-Krenn für Azure Stack HCI**
- **Vorbereitungen für das Deployment von Azure Stack HCI 23H2**
- **Cloud-based Deployment für Azure Stack HCI 23H2**
- **Fragerunde**

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Azure Stack HCI 23H2 latest News

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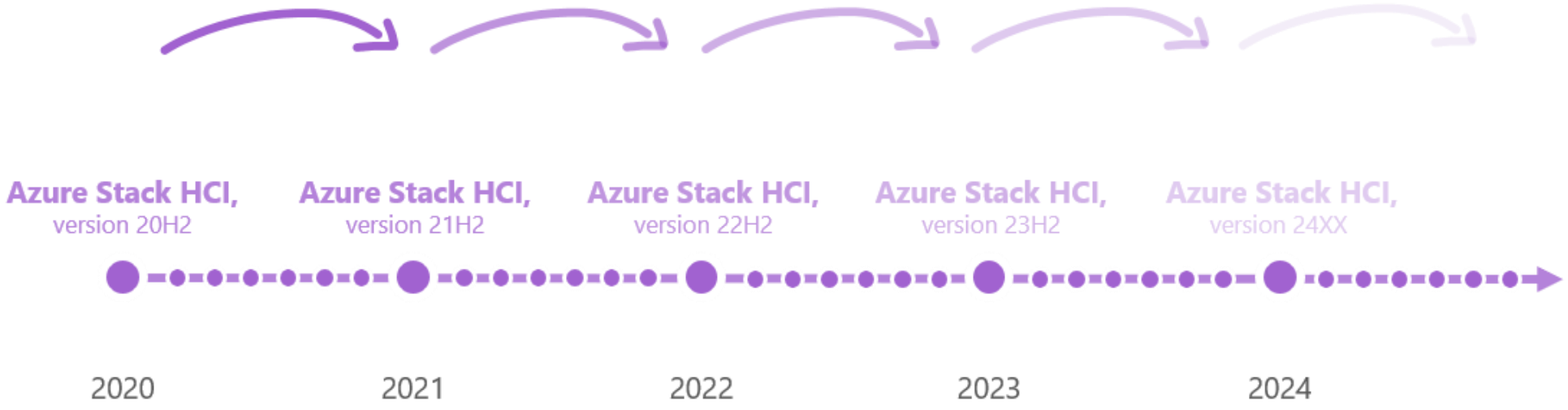
Azure Stack HCI Roadmap



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Azure Stack HCI whats next

Azure Migrate to Azure Stack HCI (preview). Use Azure Migrate to move VMs from an existing Hyper-V environment to Azure Stack HCI version 23H2. This feature uses Azure Migrate as the control plane, but the data transfer stays entirely on-premises. Support for VMware vCenter source environments is coming soon.

Microsoft Defender for Cloud for Azure Stack HCI (preview). In addition to workload protections for VMs and Kubernetes, Microsoft Defender for Cloud now offers built-in security recommendations covering your Azure Stack HCI version 23H2 infrastructure.

Azure Arc Overview for Azure Stack HCI (preview). Navigate to the Azure Stack HCI section in Azure Arc to see built-in dashboards summarizing all your Azure Stack HCI clusters. Get an at-a-glance view of alerts, updates, and more.

When to still use Azure Stack HCI 22H2

Stretch clustering. Azure Stack HCI version 23H2 is available today for “single room” deployments where all nodes are in the same room, connected to the same switch(es). It doesn’t yet support stretching the cluster between two rooms. We know that this scenario is critical for many customers, especially in manufacturing, and we are committed to providing multi-room high availability with Azure Stack HCI version 23H2, including key features like cloud-based deployment, updates, and VM provisioning. Development will take some time: we expect to share more details around mid-year. In the meantime, customers who require a stretch cluster should continue to deploy version 22H2.

System Center support. Our ambition with Azure Stack HCI and Azure Arc is to simplify and consolidate your operational experience so that you can manage everything, from infrastructure to VMs to Kubernetes, with a single control plane, the Azure Resource Manager, and a single pane of glass, the Azure portal. We’ve heard your feedback about how important this is, and we are committed to rapidly growing the capabilities of Azure Arc to achieve this vision. We also know that many customers have an existing investment in System Center that they prefer to leverage. In the coming months, System Center will add support for Azure Stack HCI version 23H2. We’re working on another blog post, together with the System Center team, to detail our long-term roadmap.

When to still use Azure Stack HCI 22H2

Coming soon: update from 22H2 to 23H2

Azure Stack HCI will offer an in-place update from version 22H2 to version 23H2. This is our fourth annual release since launching as a subscription service, and we're heartened by our customers' success keeping Azure Stack HCI up to date: over 97% of clusters are running the latest version, 22H2.

This year's update is the most advanced yet: every cluster will get the Azure Arc infrastructure, the Lifecycle Manager, and more during the update. Our highest priority is to ensure that the update is seamless, so we're taking some extra time for testing. We expect to start offering the update to a few customers as soon as next month, gradually expanding to everyone over the course of the year. Thank you for your patience as we get this right.

Until the 23H2 update has been offered to everyone, we'll continue supporting version 22H2.

There is no end date for Azure Stack HCI version 22H2 servicing or support at this time.

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Zertifizierte Systeme von Thomas-Krenn für Azure Stack HCI

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Azure Stack HCI 23H2 – zertifizierte Systeme der Thomas-Krenn.AG

Azure Stack HCI Series RI2112 Ver. 4.0

Konfigurationsinfos

Highlights
Für den Einsatz von Azure Stack HCI zertifiziert

2x Intel Scalable 3rd Gen CPU
Bis zu 2x 40-Core CPU
Bis zu 4 TB RAM

Full-NVMe

Azure Stack HCI Series RI2212 Ver. 4.0

Konfigurationsinfos

Highlights
Für den Einsatz von Azure Stack HCI zertifiziert

2x Intel Scalable 3rd Gen CPU
Bis zu 2x 40-Core CPU
Bis zu 4 TB RAM

Hybrid (NVMe / SSD / HDD)

Azure Stack HCI Series RI2224 Ver. 4.0

Konfigurationsinfos

Highlights
Für den Einsatz von Azure Stack HCI zertifiziert

2x Intel Scalable 3rd Gen CPU
Bis zu 2x 40-Core CPU
Bis zu 4 TB RAM

Full-NVMe

Azure Stack HCI Series RA2112 Ver. 4.0

Konfigurationsinfos

Highlights
Für den Einsatz von Azure Stack HCI zertifiziert

2x AMD EPYC 7003 CPU
Bis zu 2x 64-Core CPU
Bis zu 4 TB RAM

Full-NVMe

https://www.thomas-krenn.com/de/produkte/einsatzzweck/software-defined-storage/azure-stack-hci/azure-stack-hci-series-racksysteme.html

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Azure Stack HCI 23H2 – zertifizierte Systeme der Thomas-Krenn.AG

Azure Stack HCI Series RA2212 Ver. 4.0

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Bis zu 2x 64-Core CPU
Bis zu 4 TB RAM

Hybrid (NVMe / SSD / HDD)

Azure Stack HCI Series RA2224 Ver. 4.0

Konfigurationsinfos

Highlights

Für den Einsatz von Azure Stack HCI zertifiziert

2x AMD EPYC 7003 CPU
Bis zu 2x 64-Core CPU
Bis zu 4 TB RAM

Full-NVMe

Azure Stack HCI Series RA1112 Ver. 4.0

Konfigurationsinfos

Highlights

Für den Einsatz von Azure Stack HCI zertifiziert

1x AMD EPYC 7003 CPU
Bis zu 1x 64-Core CPU
Bis zu 2 TB RAM

Full-NVMe

Azure Stack HCI Series RA1212 Ver. 4.0

Konfigurationsinfos

Highlights

Für den Einsatz von Azure Stack HCI zertifiziert

1x AMD EPYC 7003 CPU
Bis zu 1x 64-Core CPU
Bis zu 2 TB RAM

Hybrid (NVMe / SSD / HDD)

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Azure Stack HCI 23H2 – zertifizierte Systeme der Thomas-Krenn.AG

Azure Stack HCI Series RA1224 Ver. 4.0

Konfigurationsinfos

Highlights

Für den Einsatz von Azure Stack HCI zertifiziert

1x AMD EPYC 7003 CPU
Bis zu 1x 64-Core CPU
Bis zu 2 TB RAM

Full-NVMe

Azure Stack HCI Series RA1448 Ver. 4.0

Konfigurationsinfos

Highlights

Für den Einsatz von Azure Stack HCI zertifiziert

1x AMD EPYC 7003 CPU
Bis zu 1x 64-Core CPU
Bis zu 2 TB RAM

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Vorbereitungen für das Deployment von Azure Stack HCI 23H2

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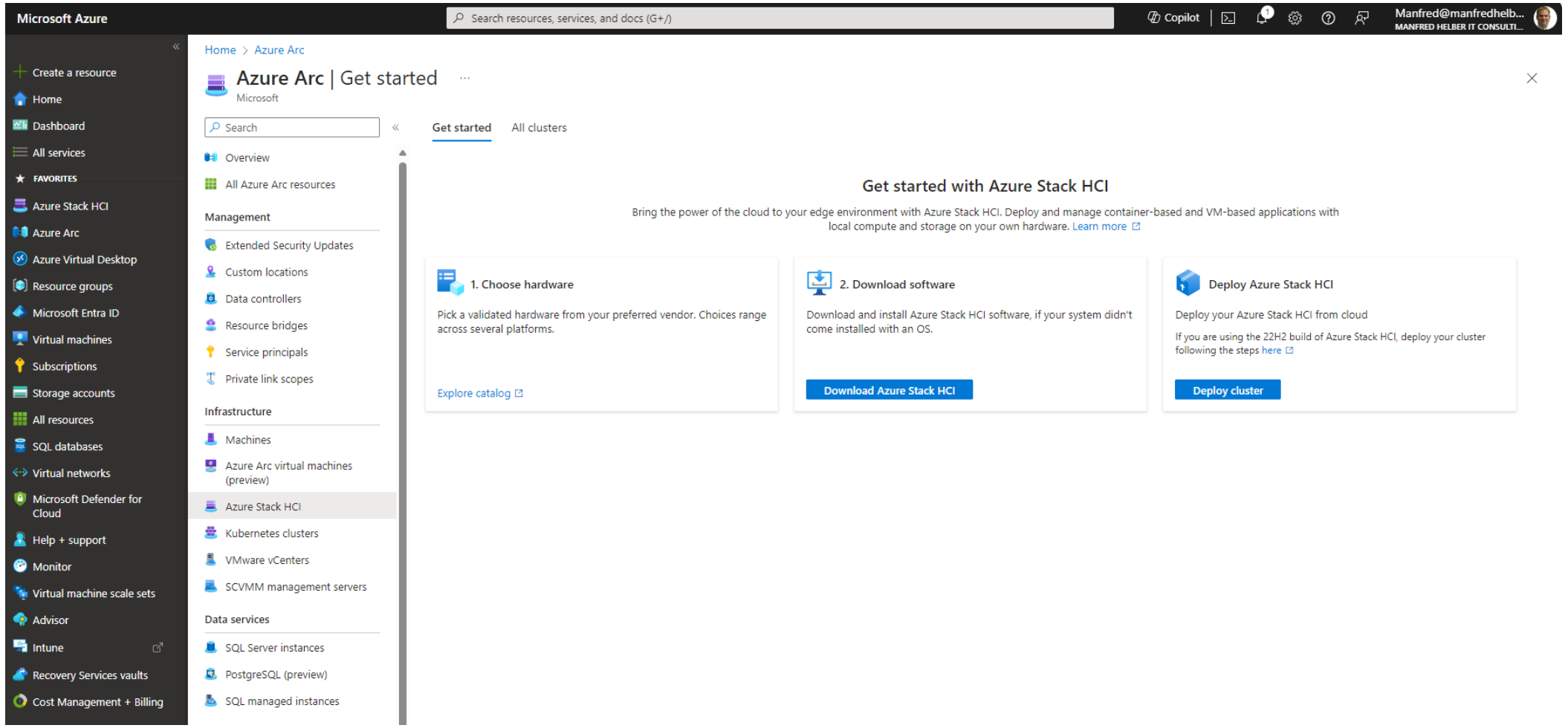

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Cloud-based Deployment für Azure Stack HCI 23H2

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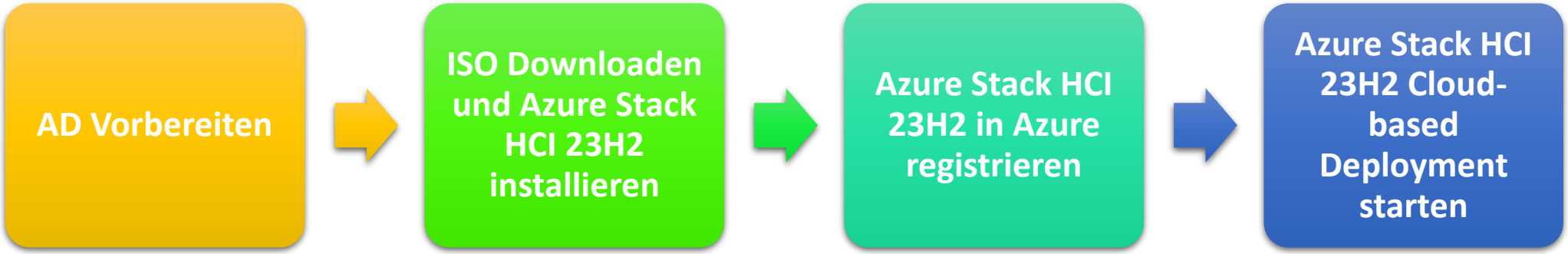

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1. AD Vorbereiten

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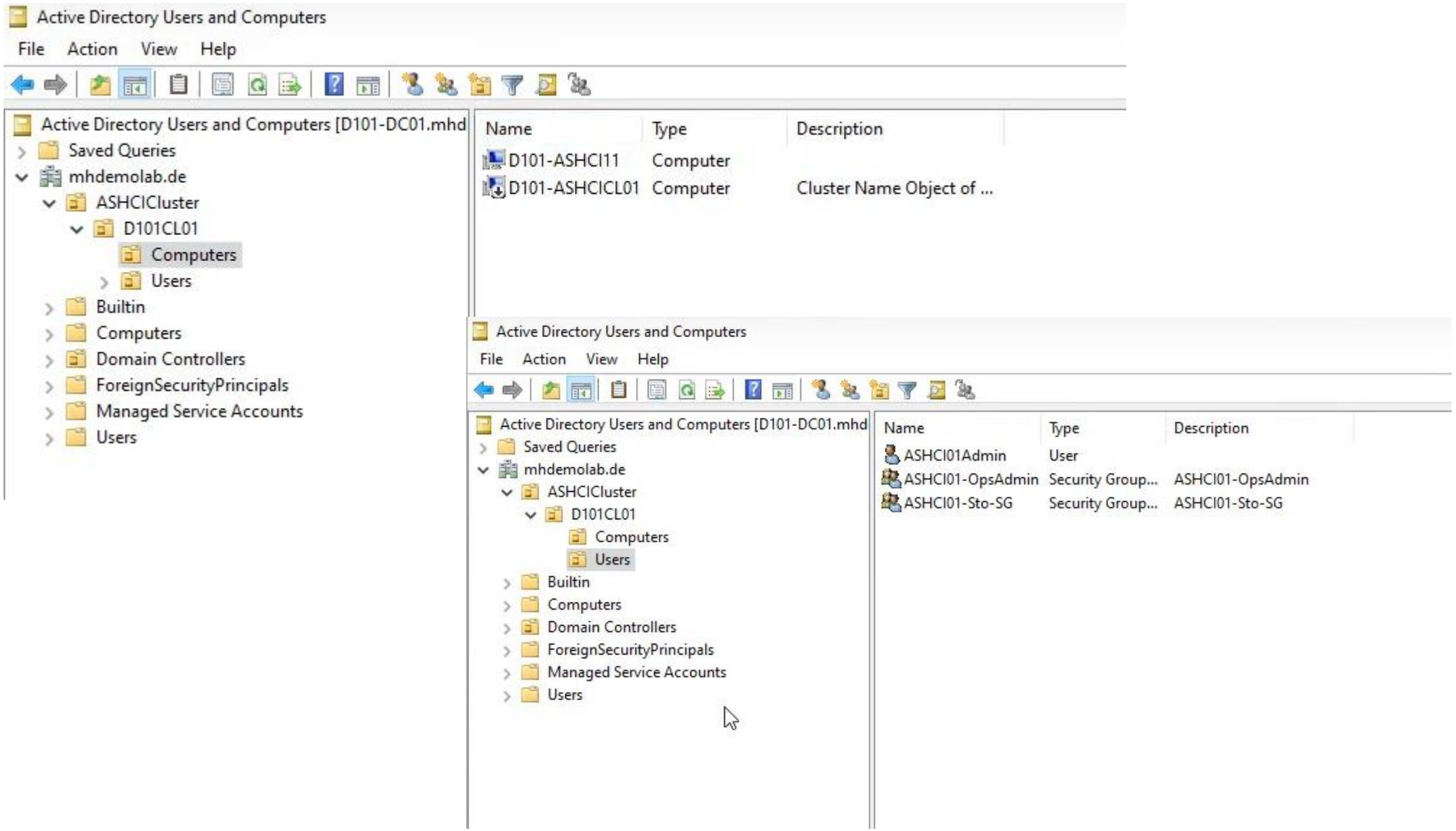

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2. ISO Downloaden und Azure Stack HCI 23H2 installieren

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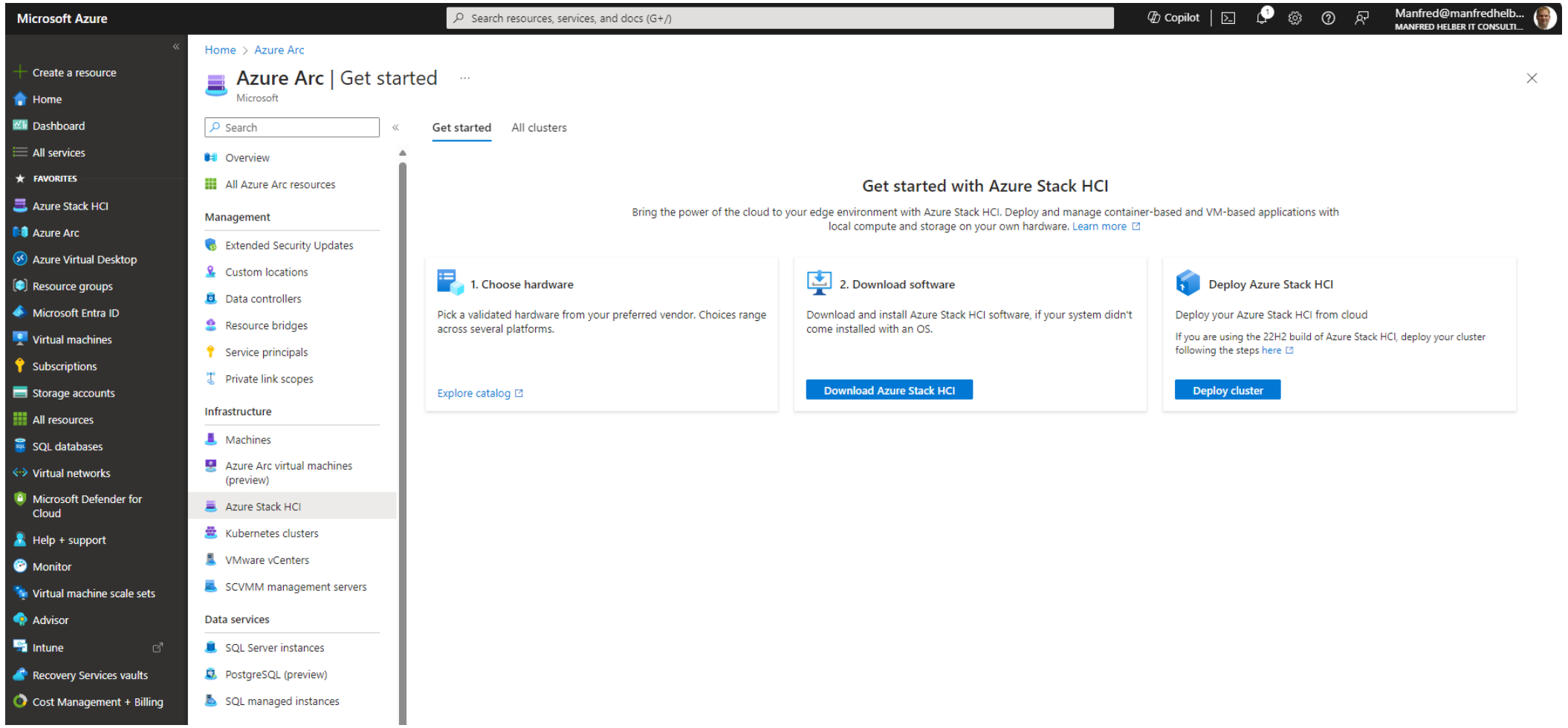

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3. Azure Stack HCI 23H2 in Azure registrieren

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PowerShell Copy

```powershell
#Connect to your Azure account and Subscription
Connect-AzAccount -SubscriptionId $Subscription -TenantId $Tenant -DeviceCode

#Get the Access Token for the registration
$ARMtoken = (Get-AzAccessToken).Token

#Get the Account ID for the registration
$id = (Get-AzContext).Account.Id
```

PowerShell Copy

```powershell
#Invoke the registration script. For this release, eastus and westeurope regions ar
Invoke-AzStackHciArcInitialization -SubscriptionID $Subscription -ResourceGroup $RG
```

4. Azure Stack HCI 23H2 Cloud-based Deployment

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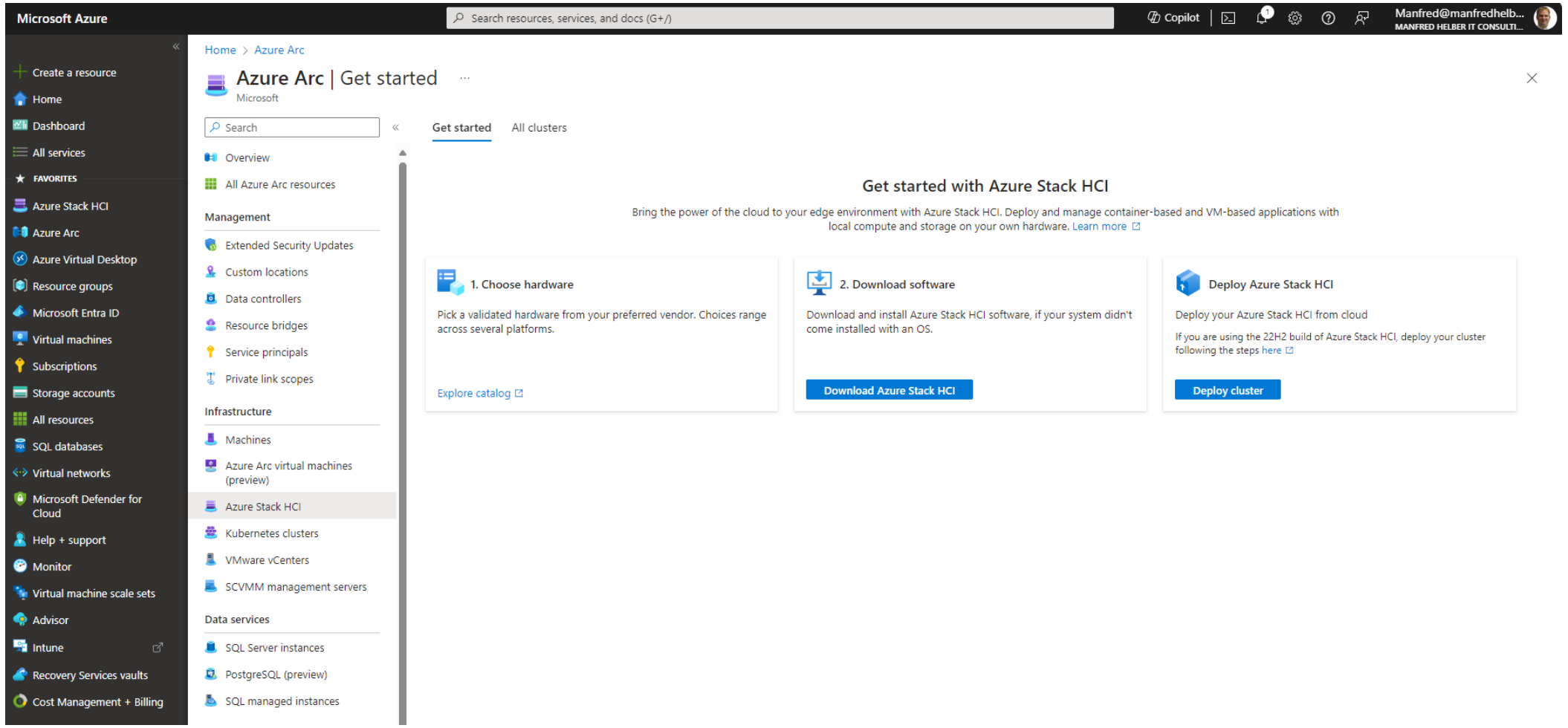

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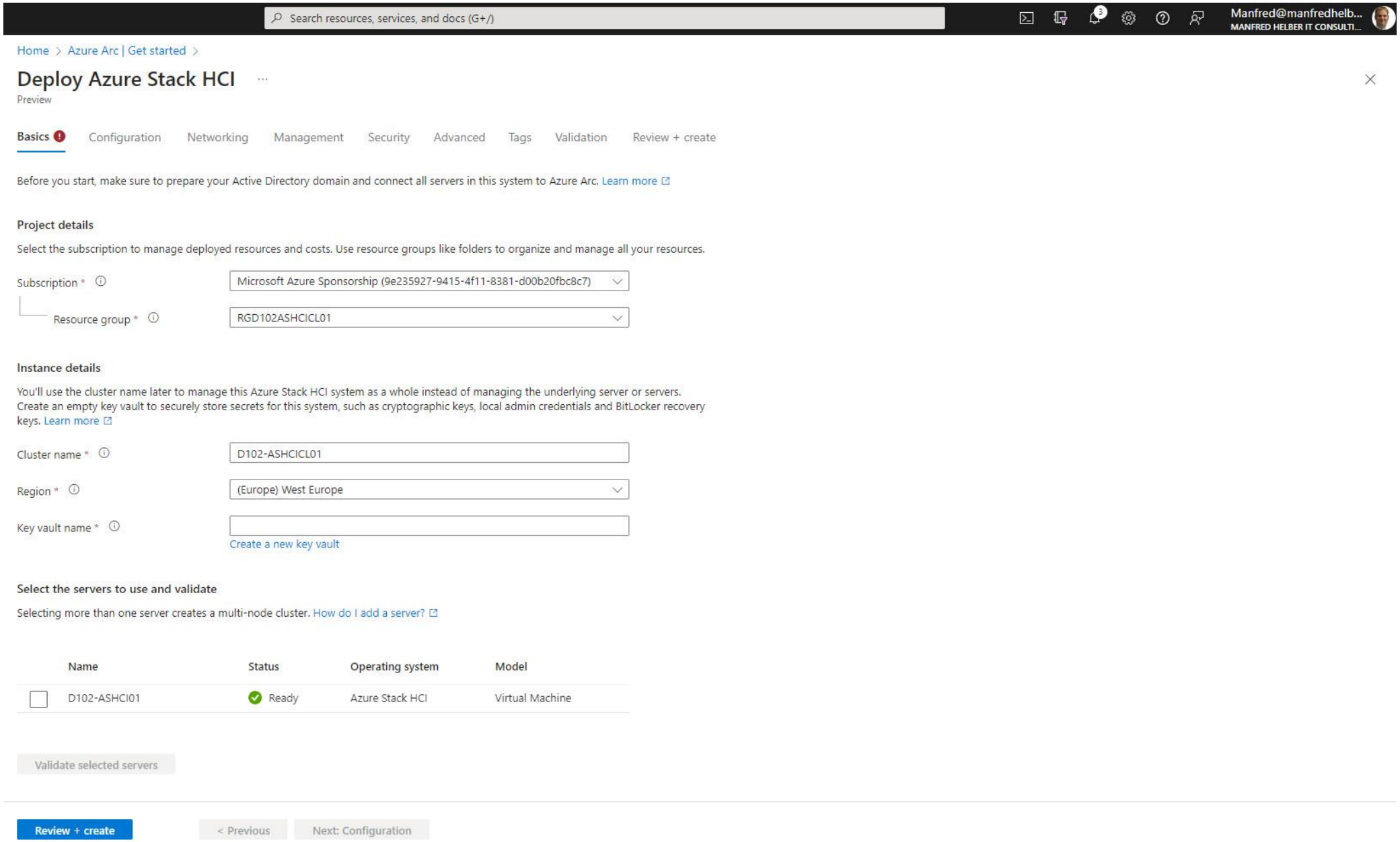

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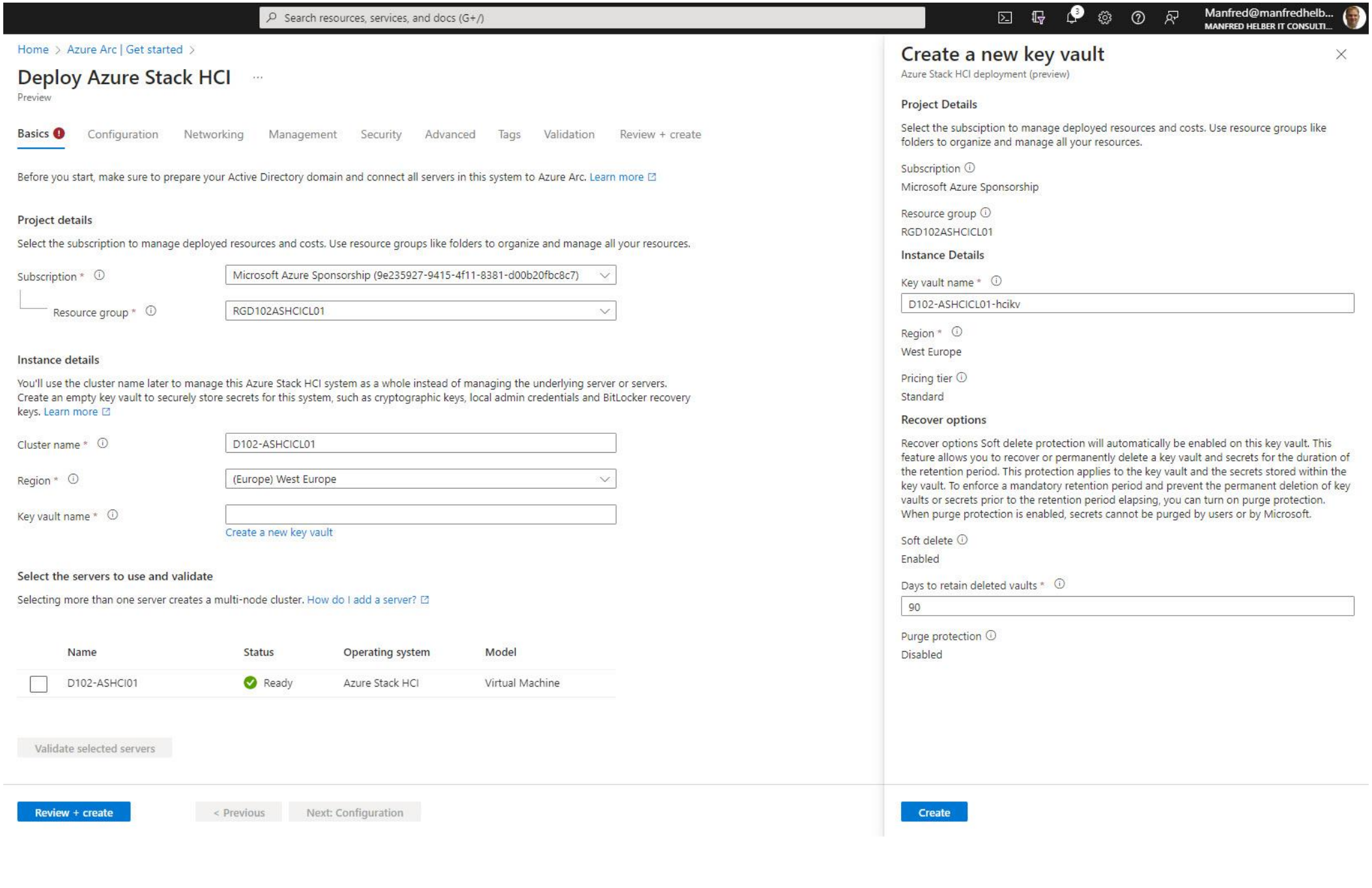

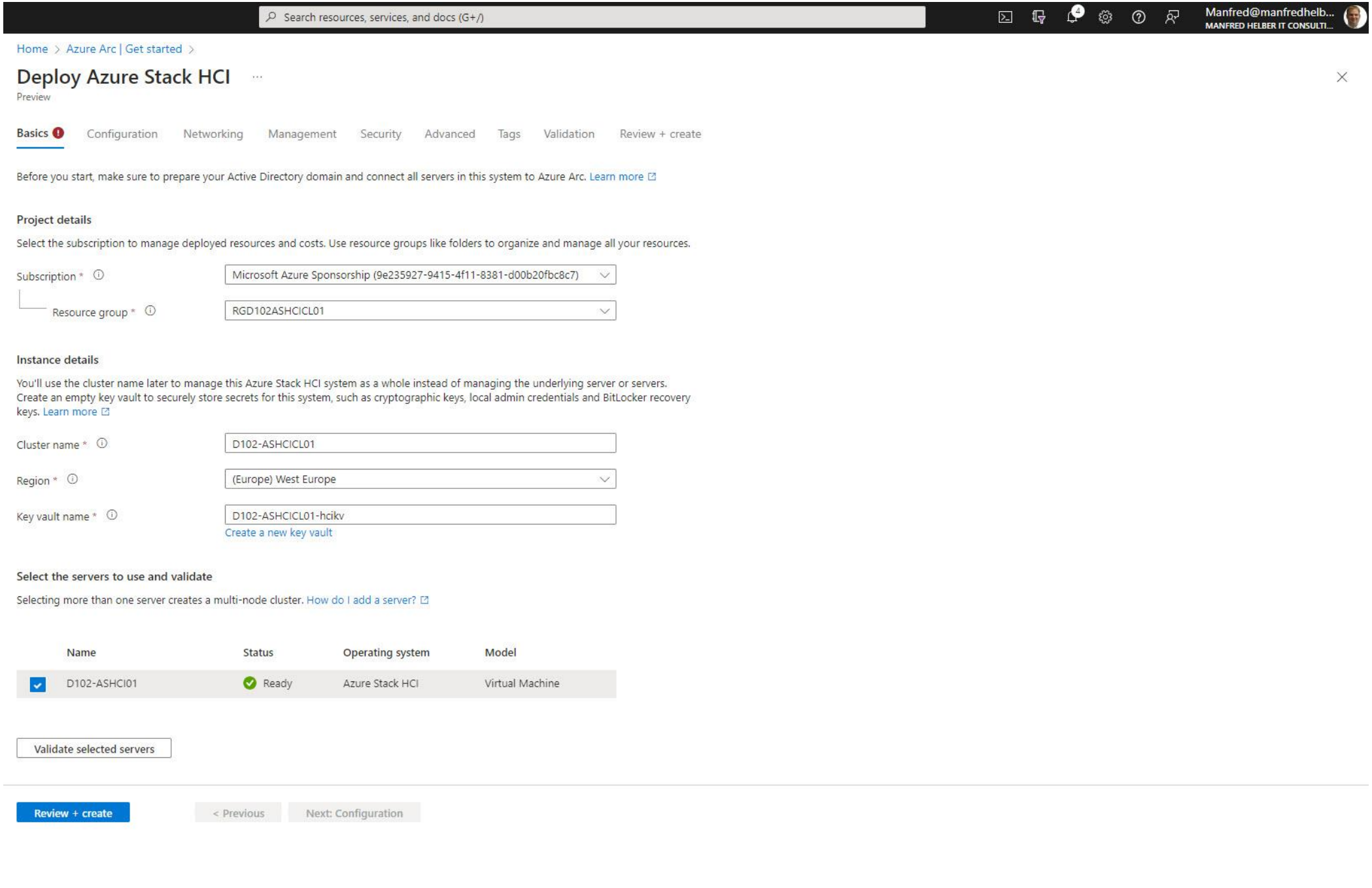

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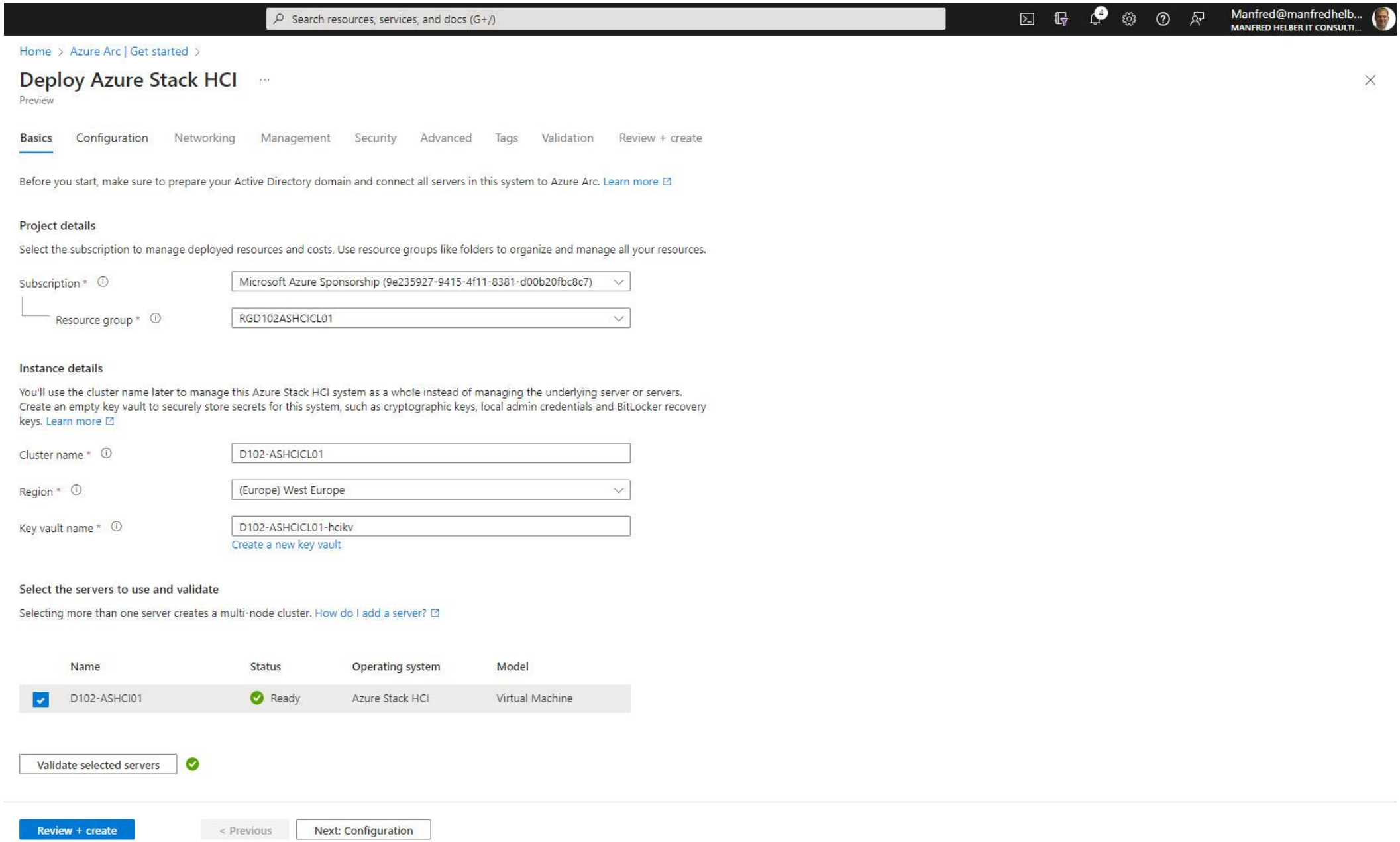

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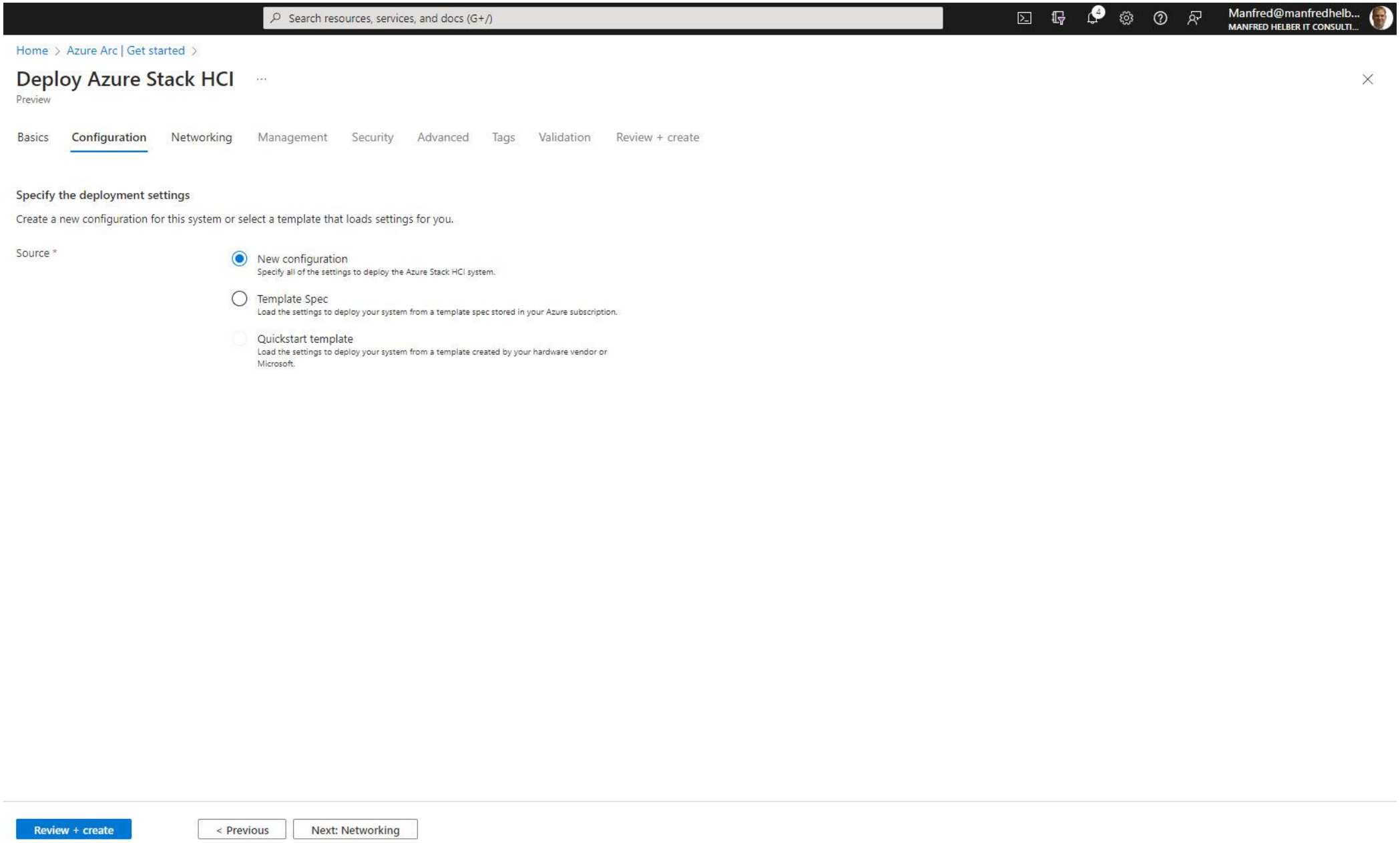

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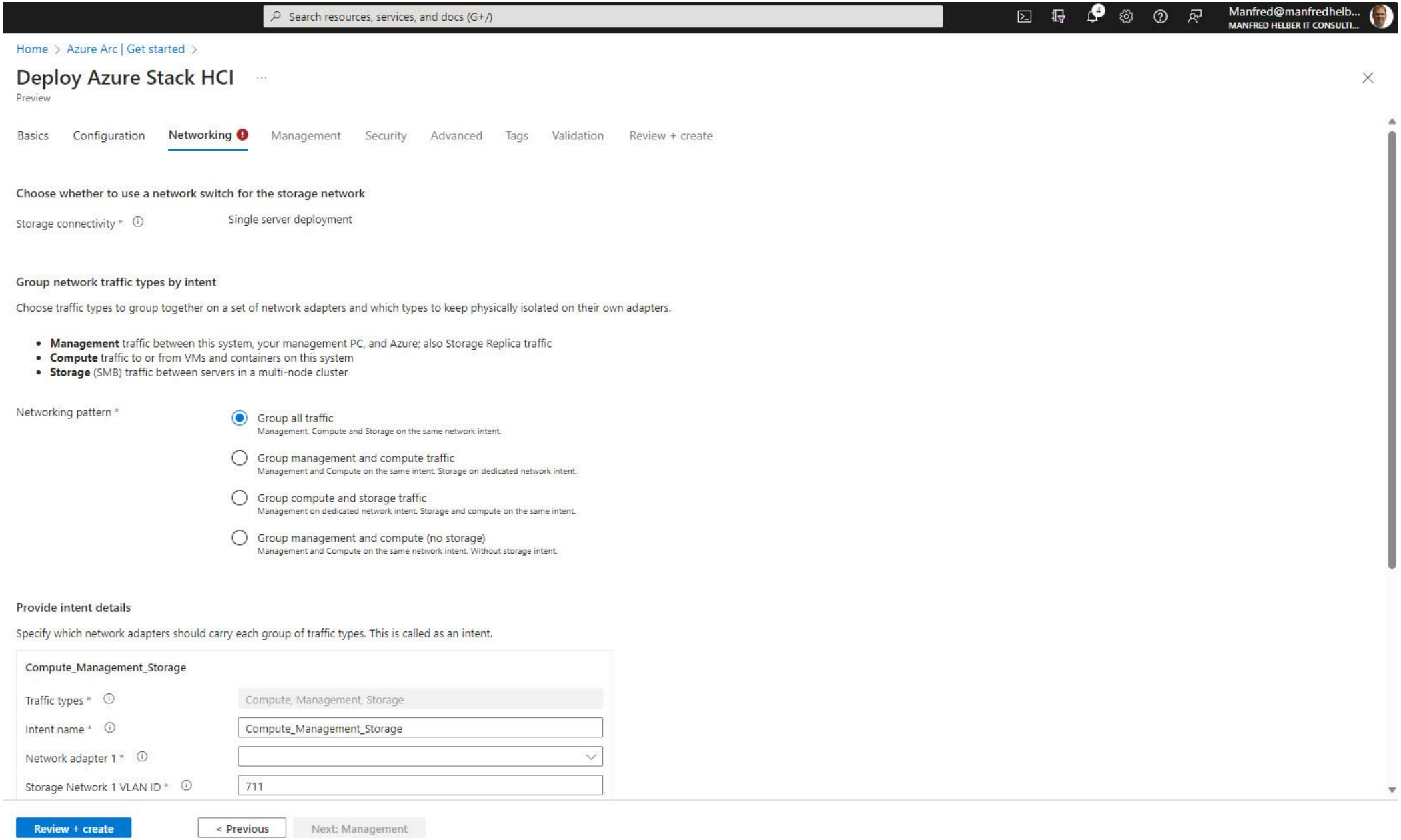

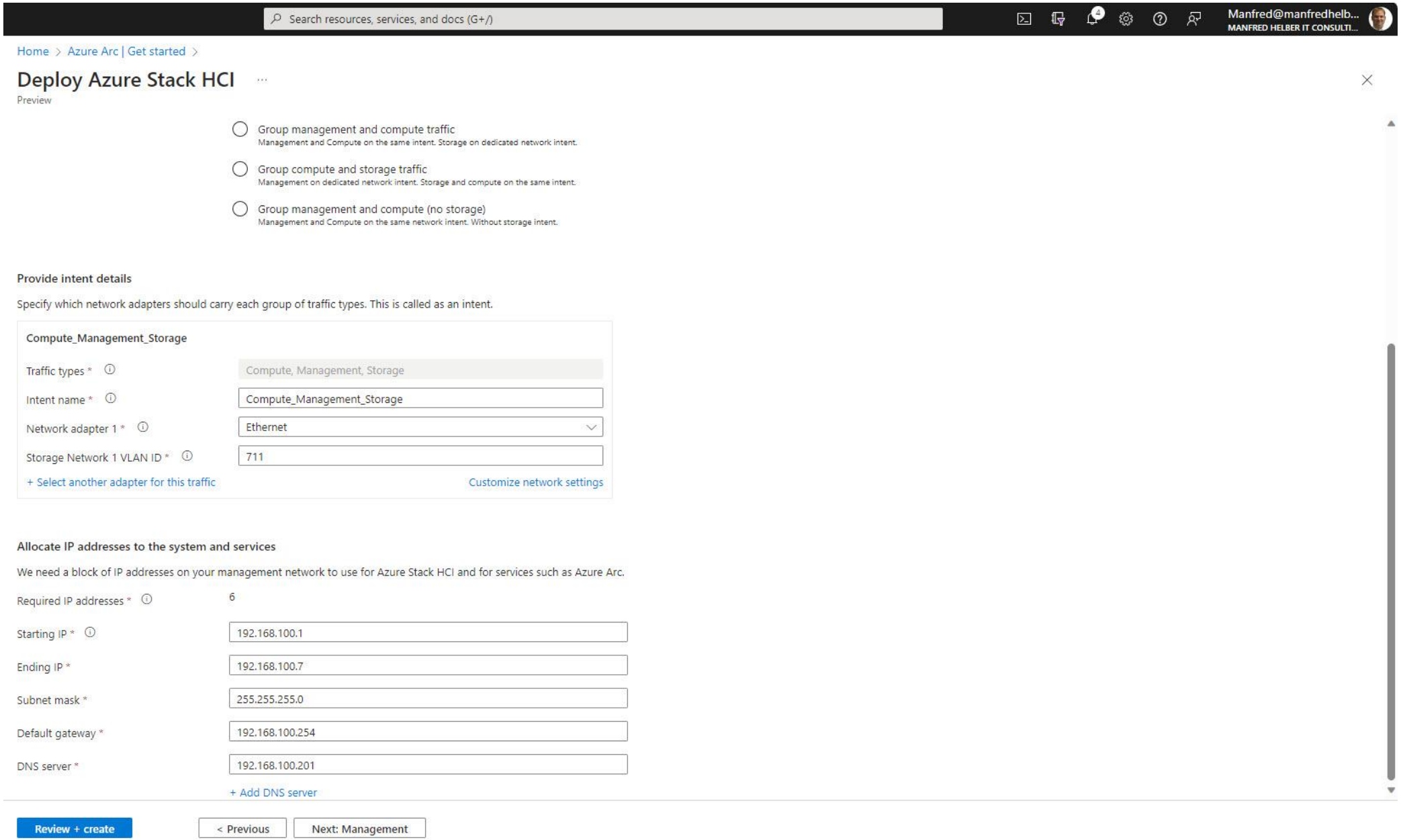

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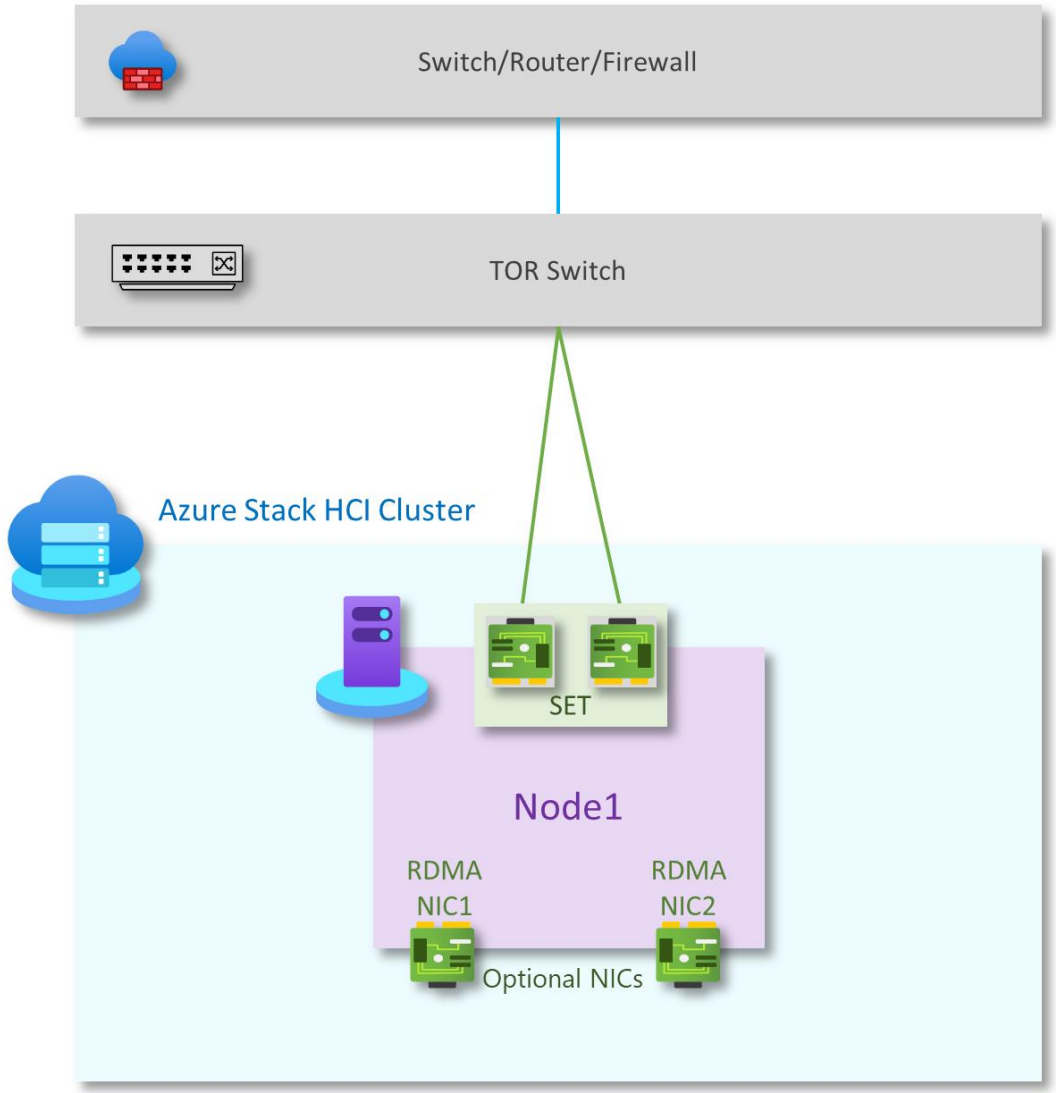
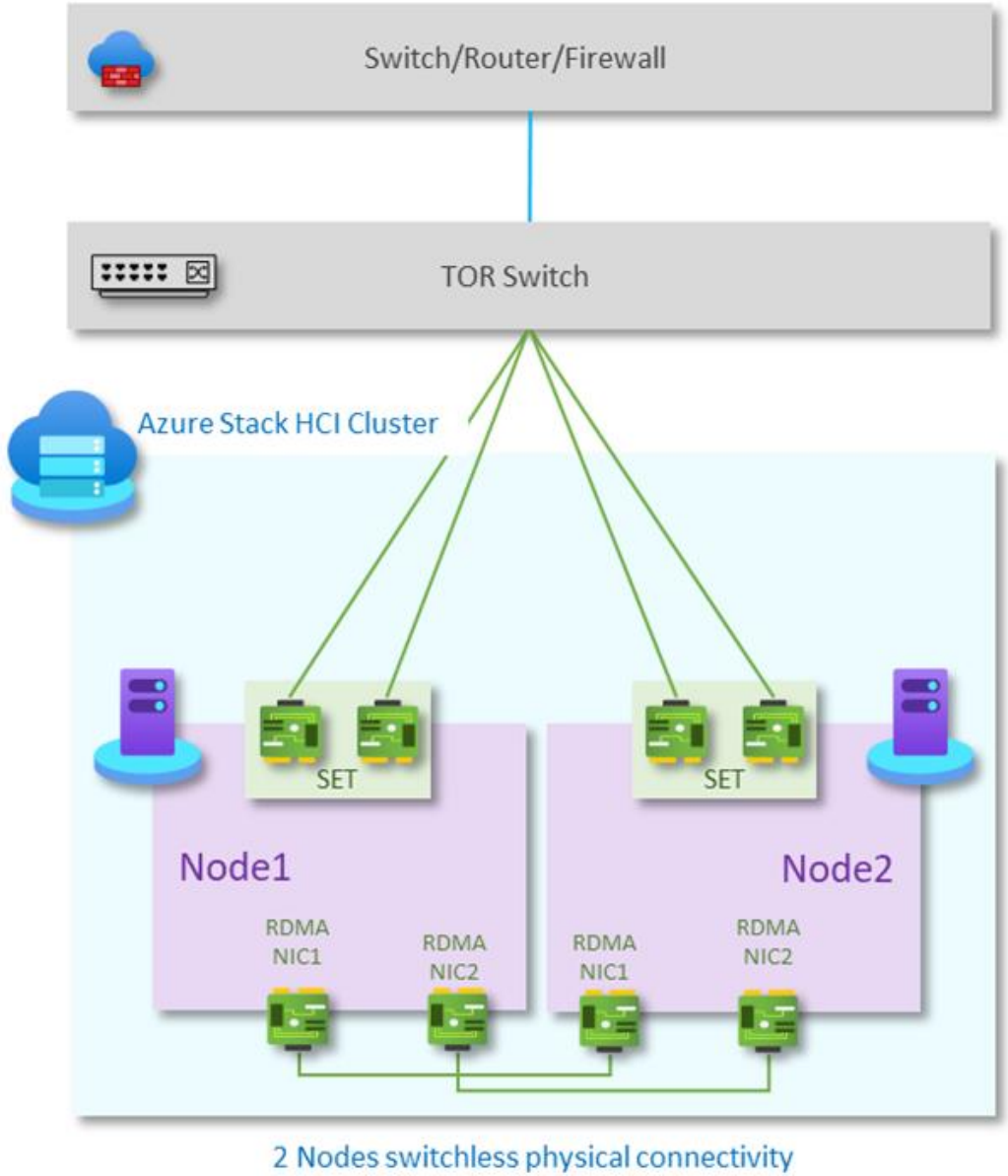
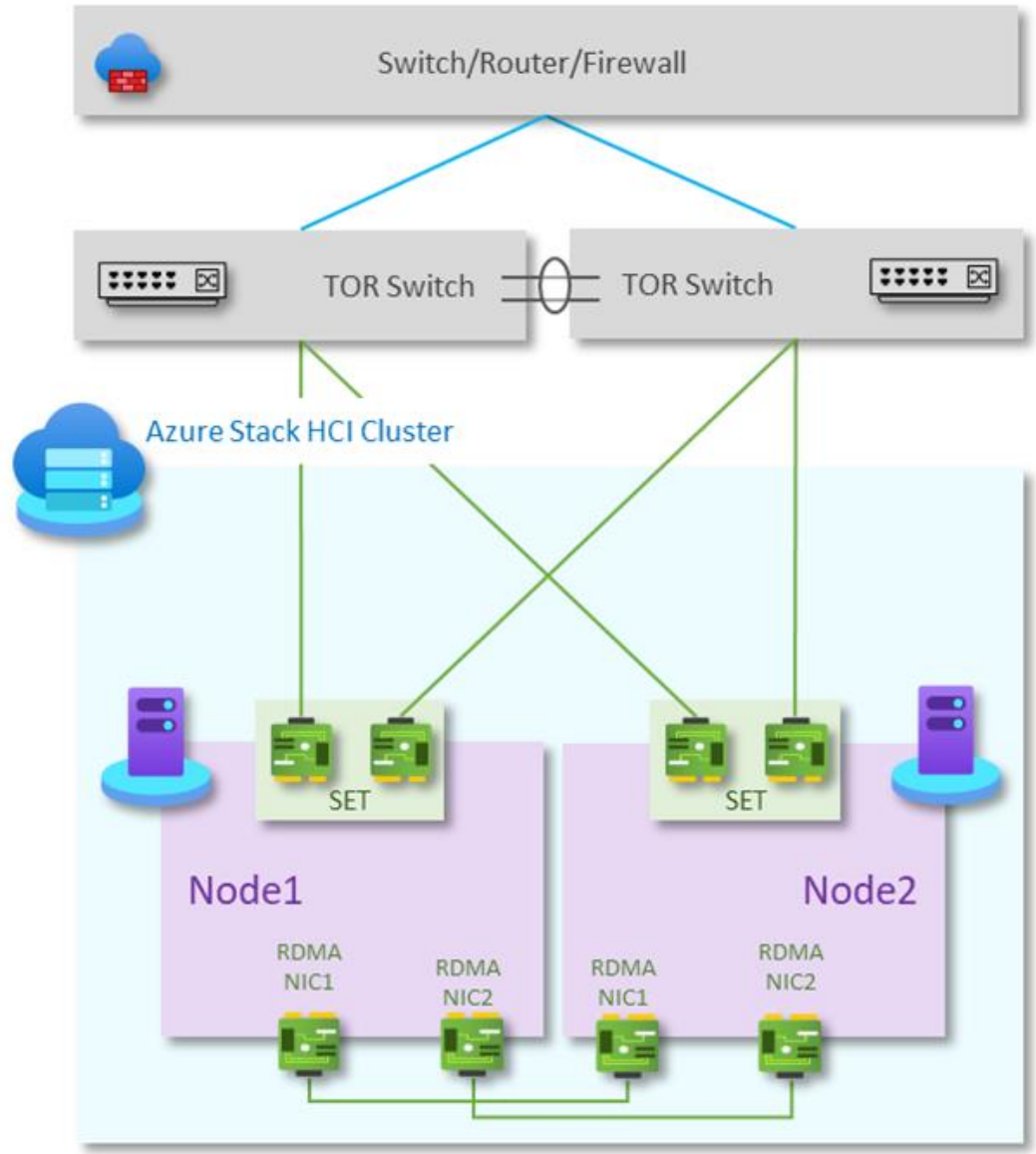
Supported network topologies

Network topology	Azure portal	ARM template
One node - no switch for storage	By default	Supported
One node - with network switch for storage	Not applicable	Supported
Two nodes - no switch for storage	Supported	Supported
Two nodes - with network switch for storage	Supported	Supported
Three nodes - with no switch for storage	Not supported	Test only No update or repair support
Three nodes - with network switch for storage	Supported	Supported
Four to 16 nodes - with no network switch for storage	Not supported	Not supported
Four to 16 nodes - with network switch for storage	Supported	Supported





2 Nodes switchless physical connectivity



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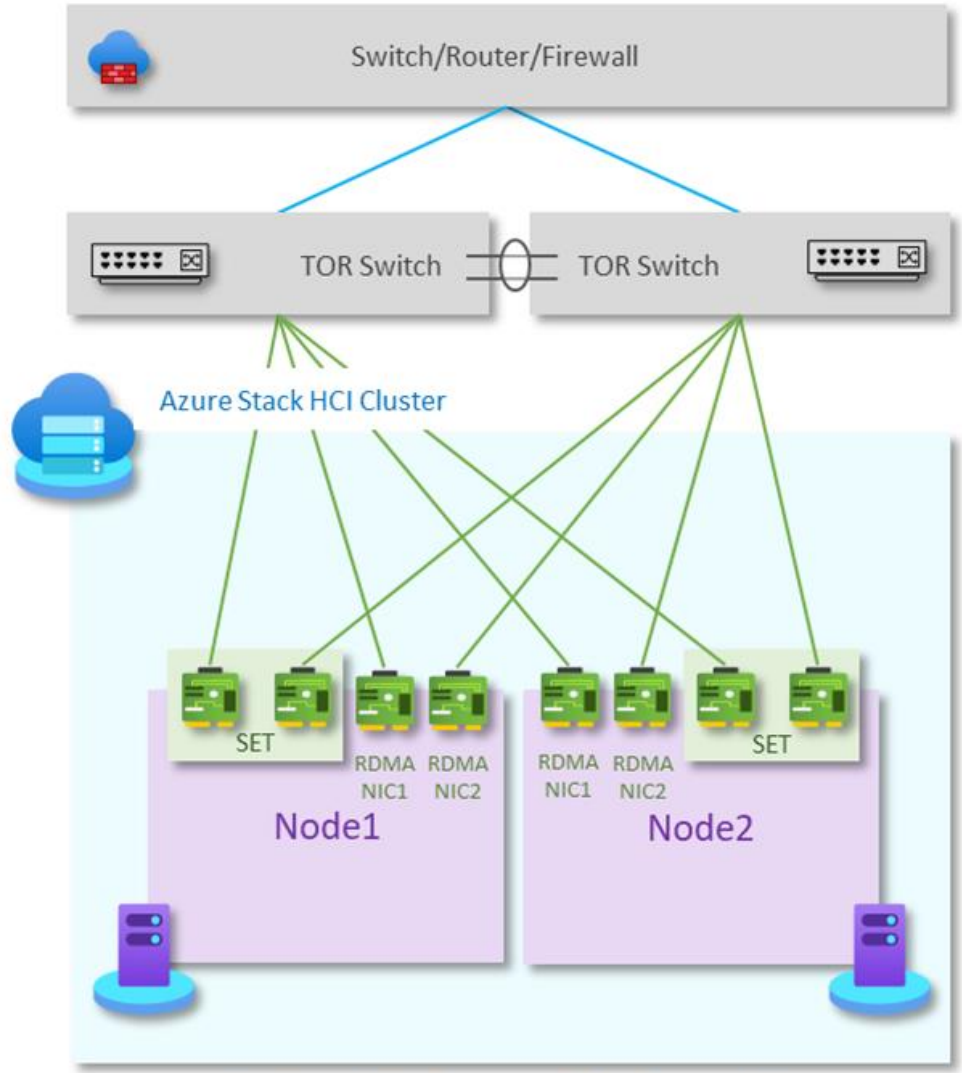
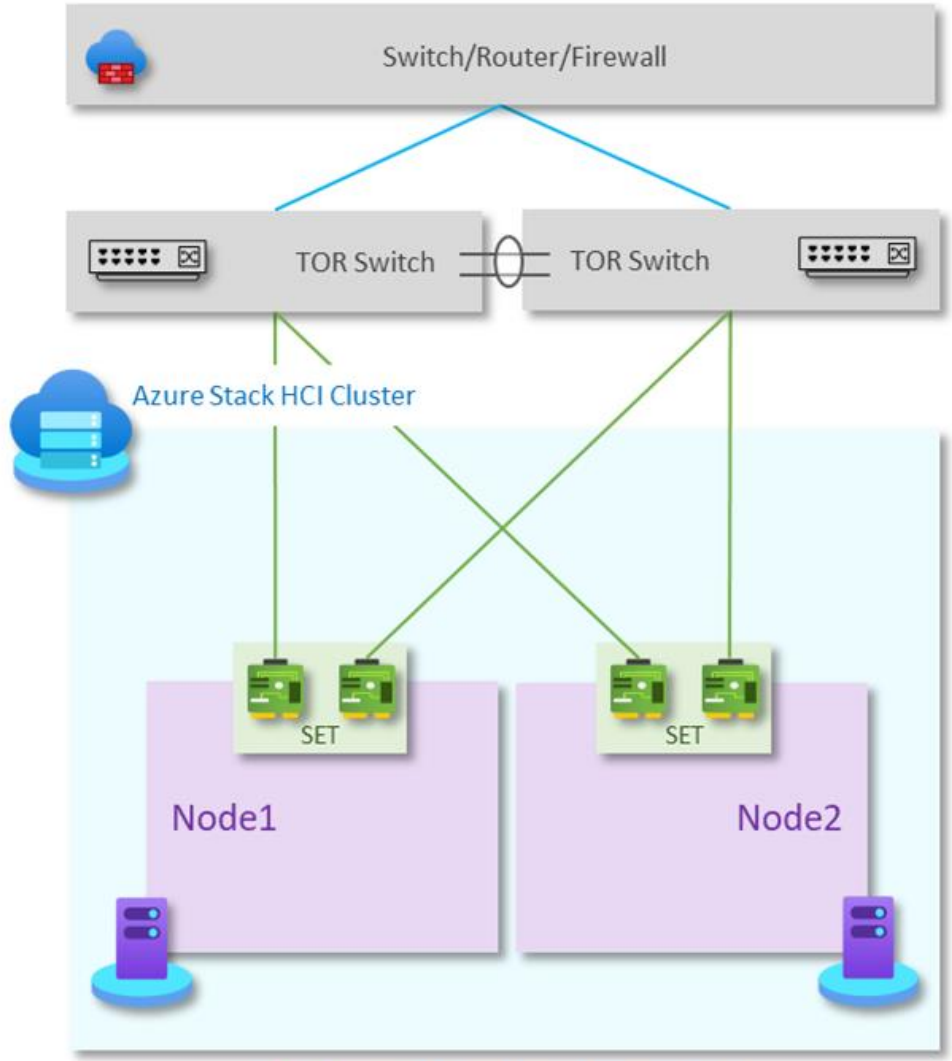
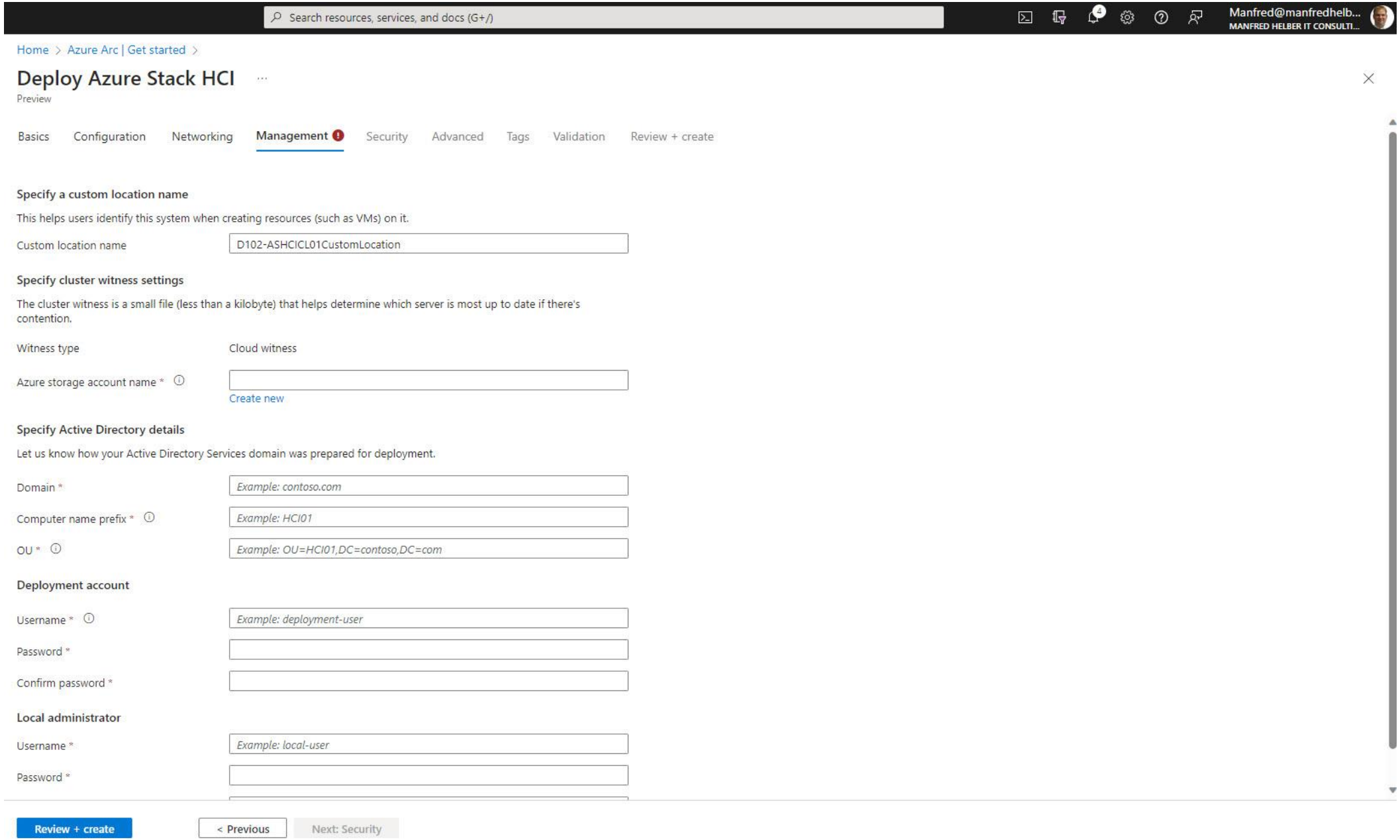


2 Nodes switched storage physical connectivity



2 Nodes switchless physical connectivity



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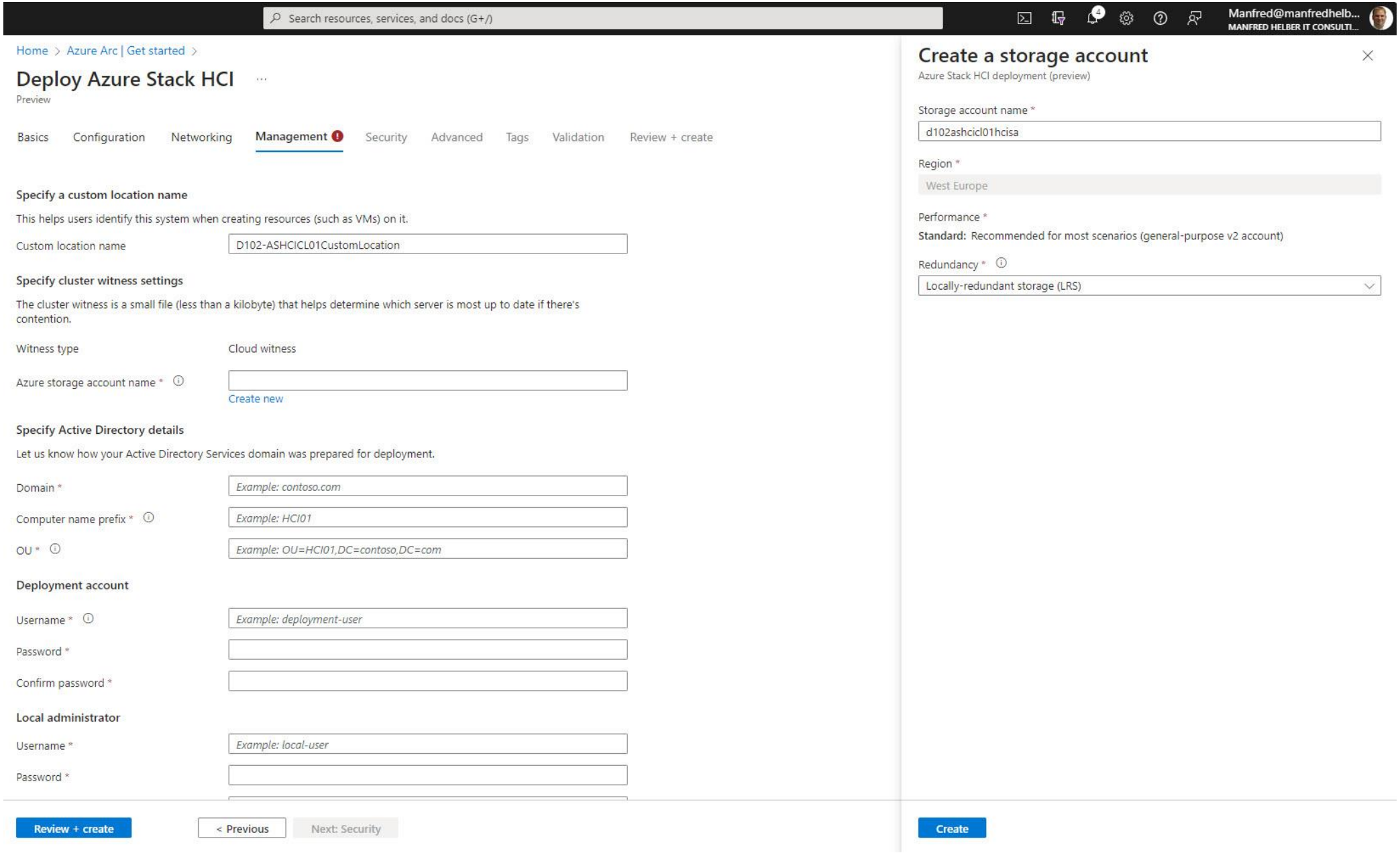

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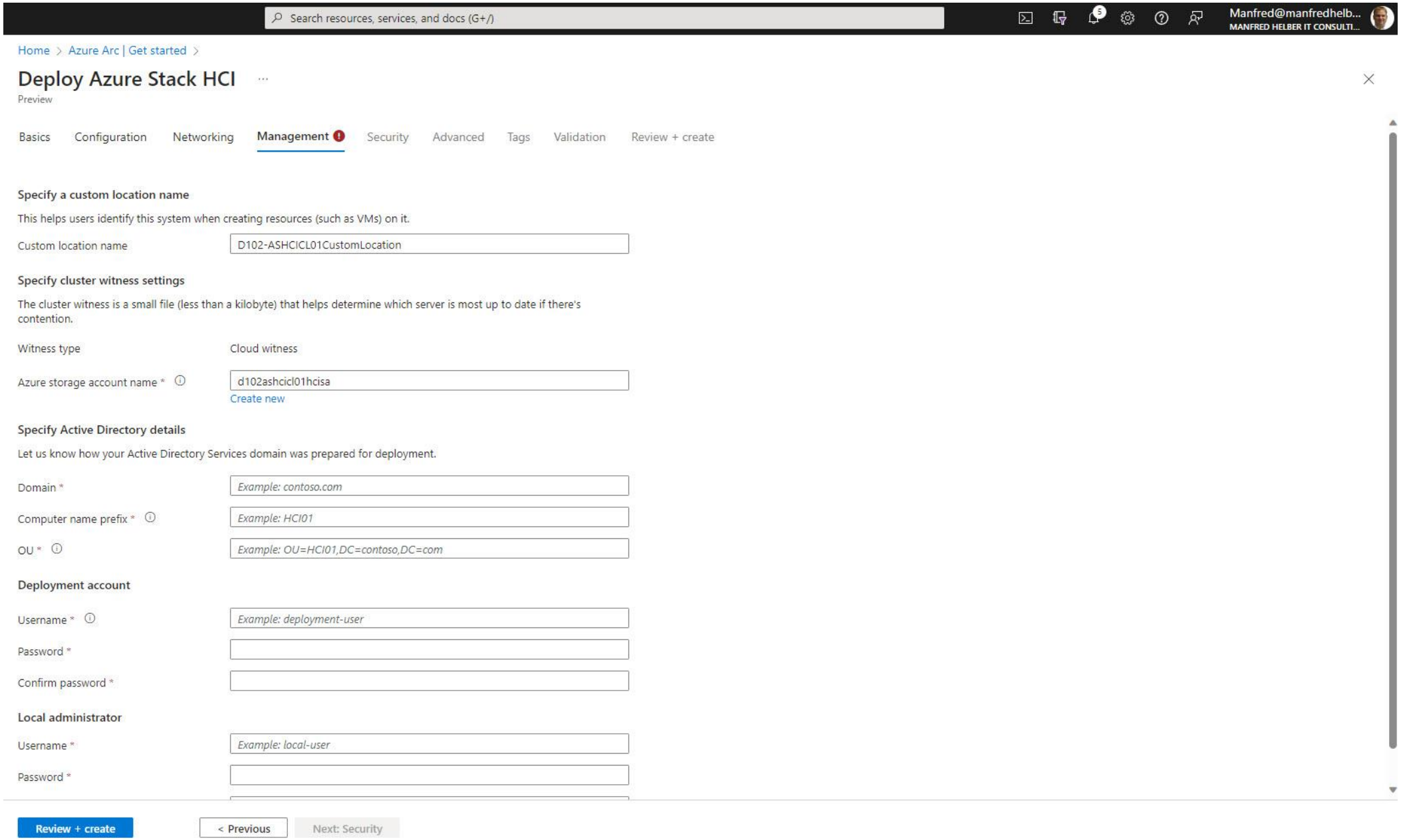

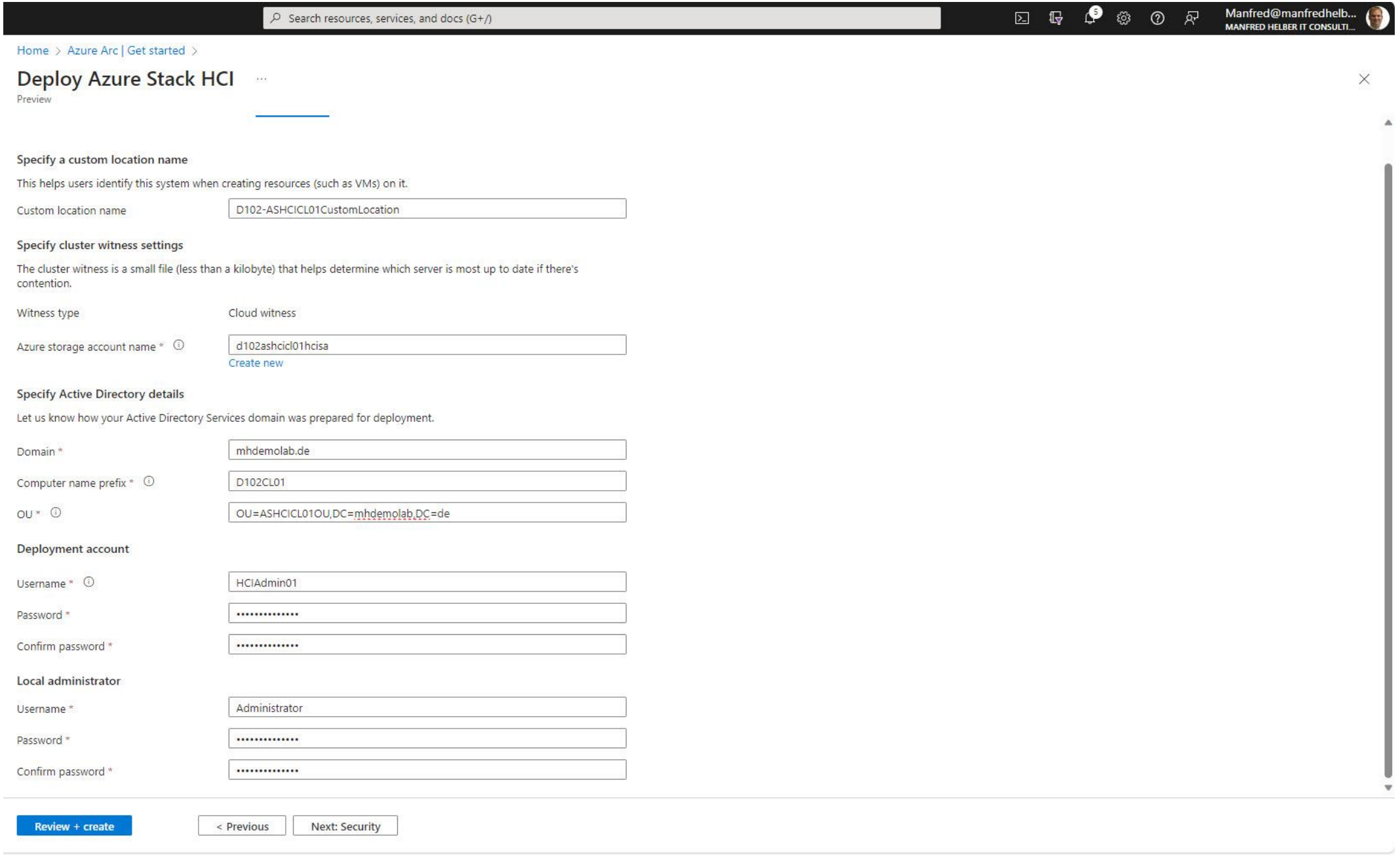

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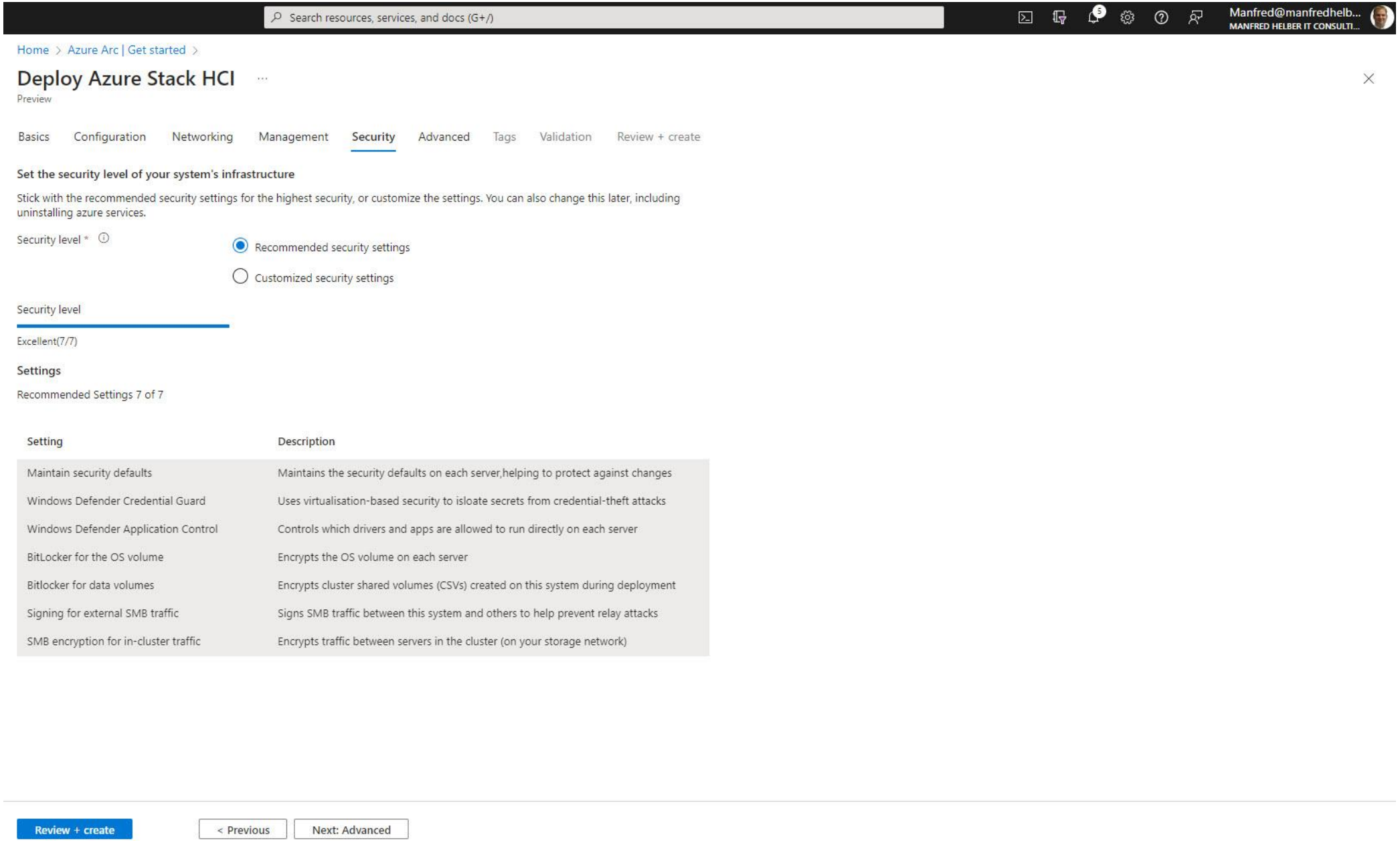

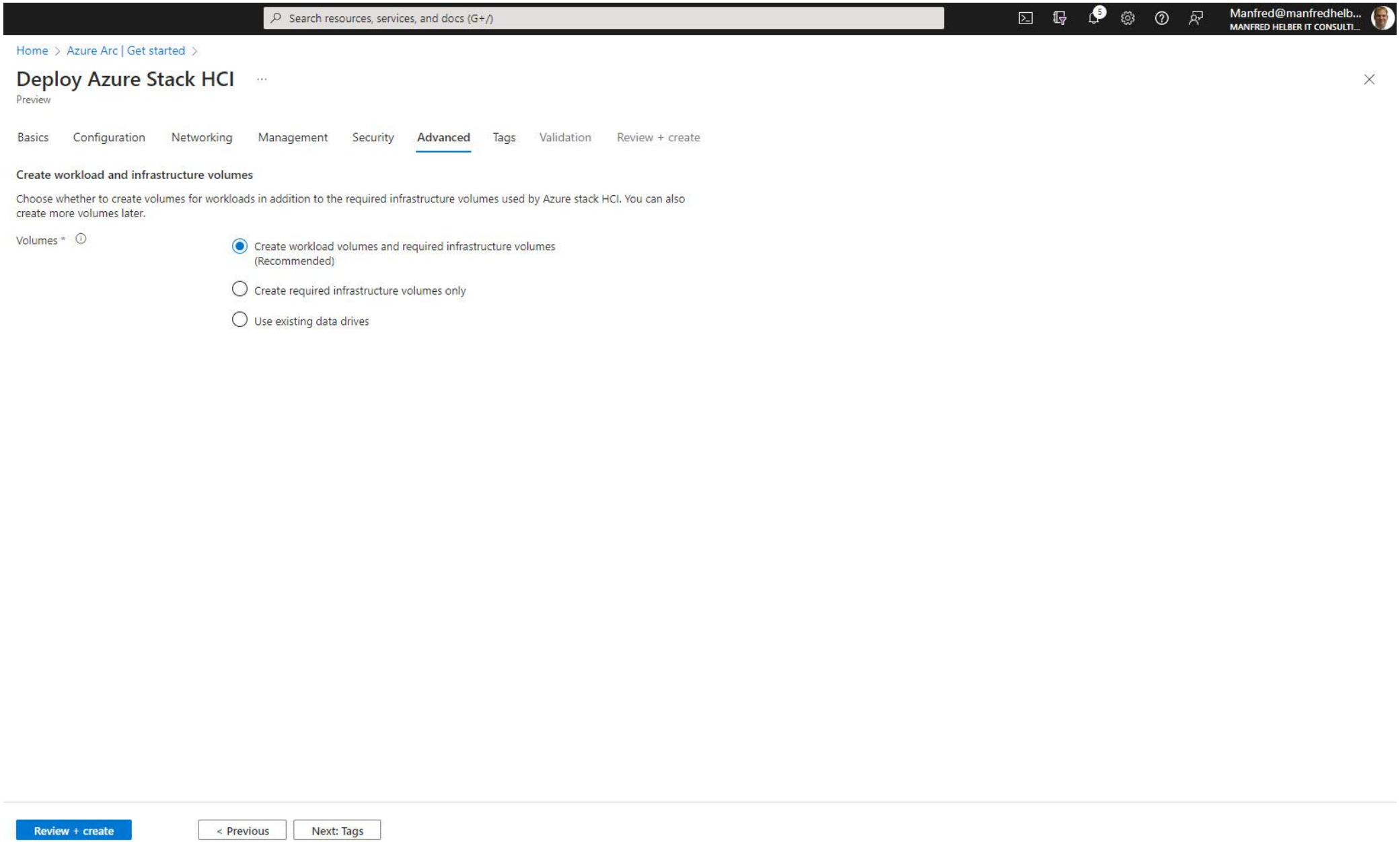

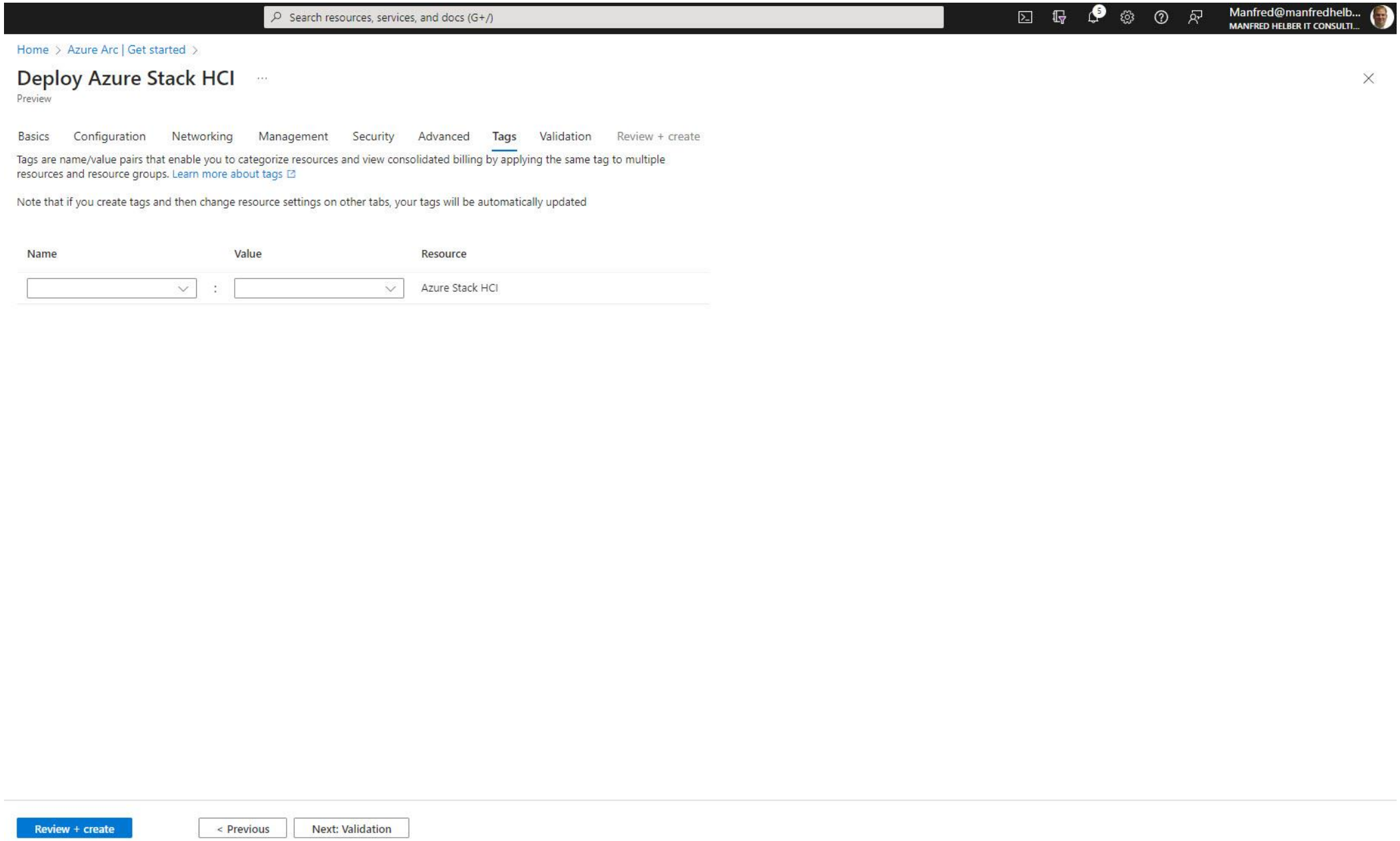

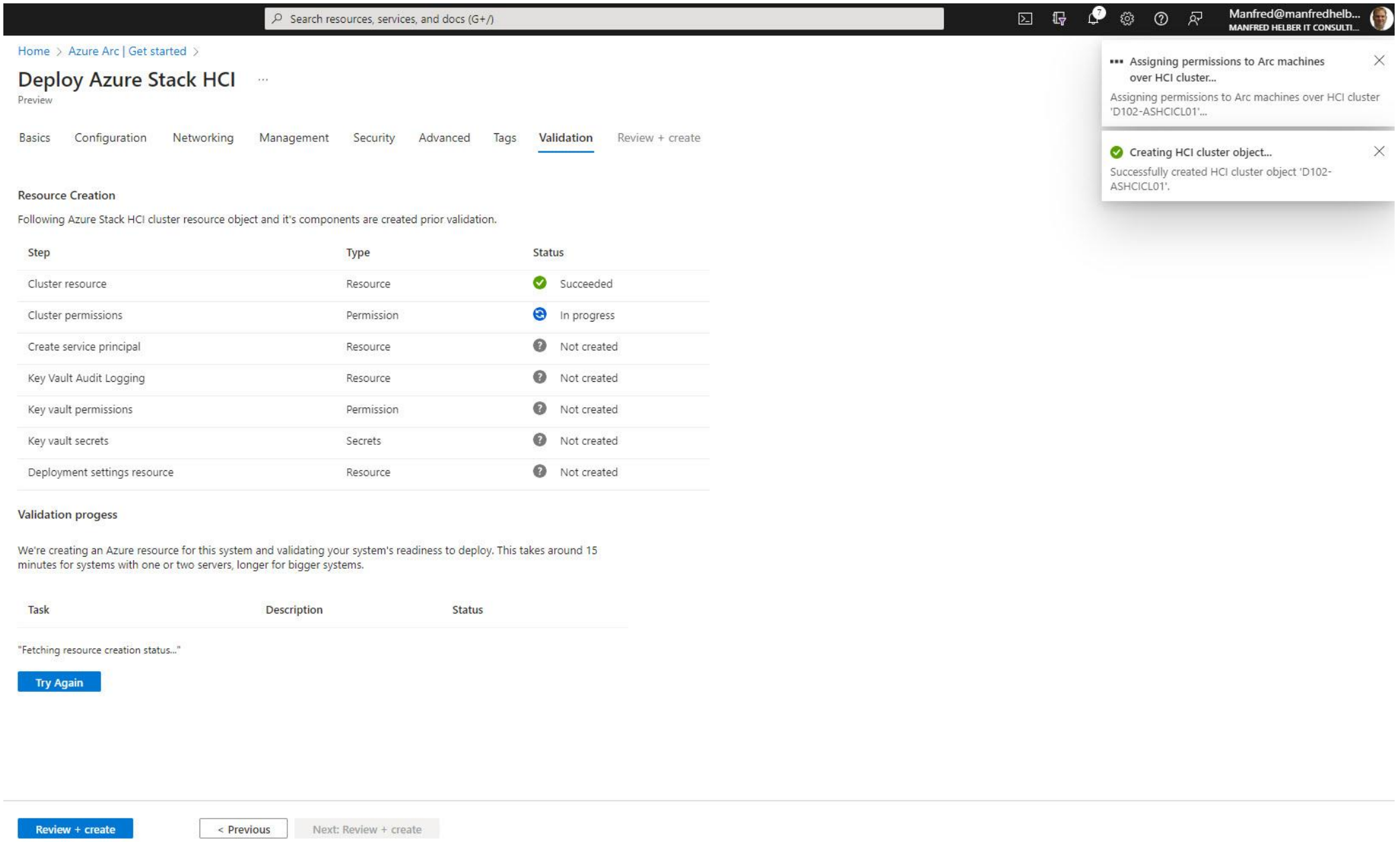

Home > Azure Arc | Get started >

Deploy Azure Stack HCI

Preview

Basics | Configuration | Networking | Management | Security | Advanced | Tags | Validation | Review + create

Resource Creation

Following Azure Stack HCI cluster resource object and it's components are created prior validation.

Step	Type	Status
Cluster resource	Resource	Succeeded
Cluster permissions	Permission	Succeeded
Create service principal	Resource	Succeeded
Key Vault Audit Logging	Resource	Succeeded
Key vault permissions	Permission	Succeeded
Key vault secrets	Secrets	Succeeded
Deployment settings resource	Resource	In progress

Validation progess

We're creating an Azure resource for this system and validating your system's readiness to deploy. This takes around 15 minutes for systems with one or two servers, longer for bigger systems.

Task	Description	Status

"Fetching resource creation status..."

Try Again

Review + create | < Previous | Next: Review + create

Deploy Azure Stack HCI

Preview

Basics | Configuration | Networking | Management | Security | Advanced | Tags | Validation | Review + create

Resource Creation

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Key Vault Audit Logging	Resource	Succeeded
Key vault permissions	Permission	Succeeded
Key vault secrets	Secrets	Succeeded
Deployment settings resource	Resource	Succeeded

Validation progess

We're creating an Azure resource for this system and validating your system's readiness to deploy. This takes around 15 minutes for systems with one or two servers, longer for bigger systems.

Task	Description	Status
Azure Stack HCI Connectivity	Check external connectivity requirements	Success(View details)
Azure Stack HCI External Active Directory	Check external active directory preparation	Success(View details)
Azure Stack HCI Hardware	Check hardware requirements	Success(View details)
Azure Stack HCI Network	Check network requirements	Success(View details)
Azure Stack HCI Observability	Check Log Collection and Remote Support requirements	Success(View details)

Review + create | < Previous | Next: Review + create

Deploy Azure Stack HCI

Preview

Cluster resource	Resource	Succeeded
Cluster permissions	Permission	Succeeded
Create service principal	Resource	Succeeded
Key Vault Audit Logging	Resource	Succeeded
Key vault permissions	Permission	Succeeded
Key vault secrets	Secrets	Succeeded
Deployment settings resource	Resource	Succeeded

Validation progess

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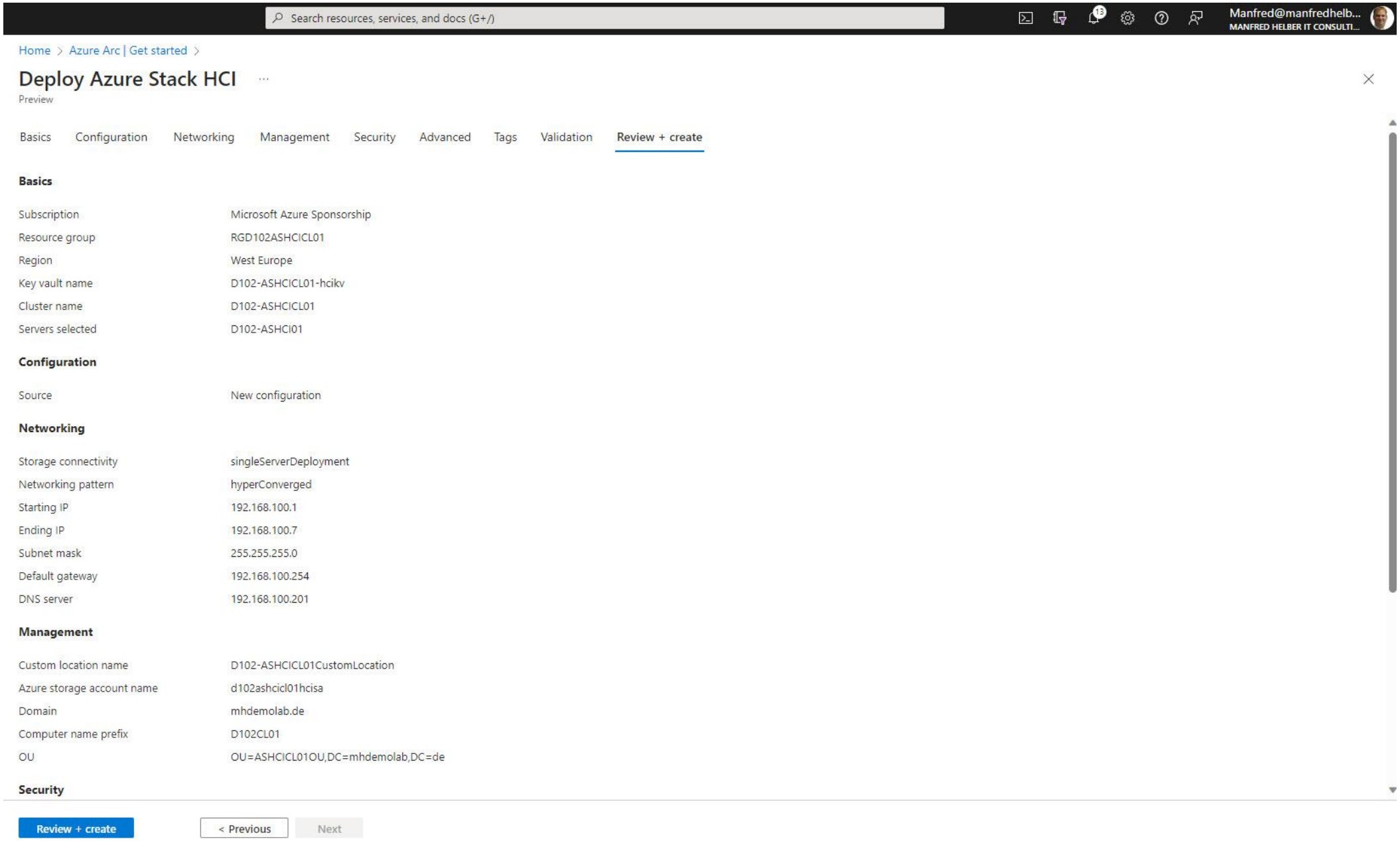
Task	Description	Status
Azure Stack HCI Connectivity	Check external connectivity requirements	Success(View details)
Azure Stack HCI External Active Directory	Check external active directory preparation	Success(View details)
Azure Stack HCI Hardware	Check hardware requirements	Success(View details)
Azure Stack HCI Network	Check network requirements	Success(View details)
Azure Stack HCI Observability	Check Log Collection and Remote Support requirements	Success(View details)
Azure Stack HCI Software	Check Operating System requirements	Success(View details)
Azure Stack HCI MOC Stack	Check Moc Stack requirements	Success(View details)
Azure Stack HCI Arc Integration	Check ARC Integration requirements	Success(View details)

Try Again

Review + create < Previous Next: Review + create



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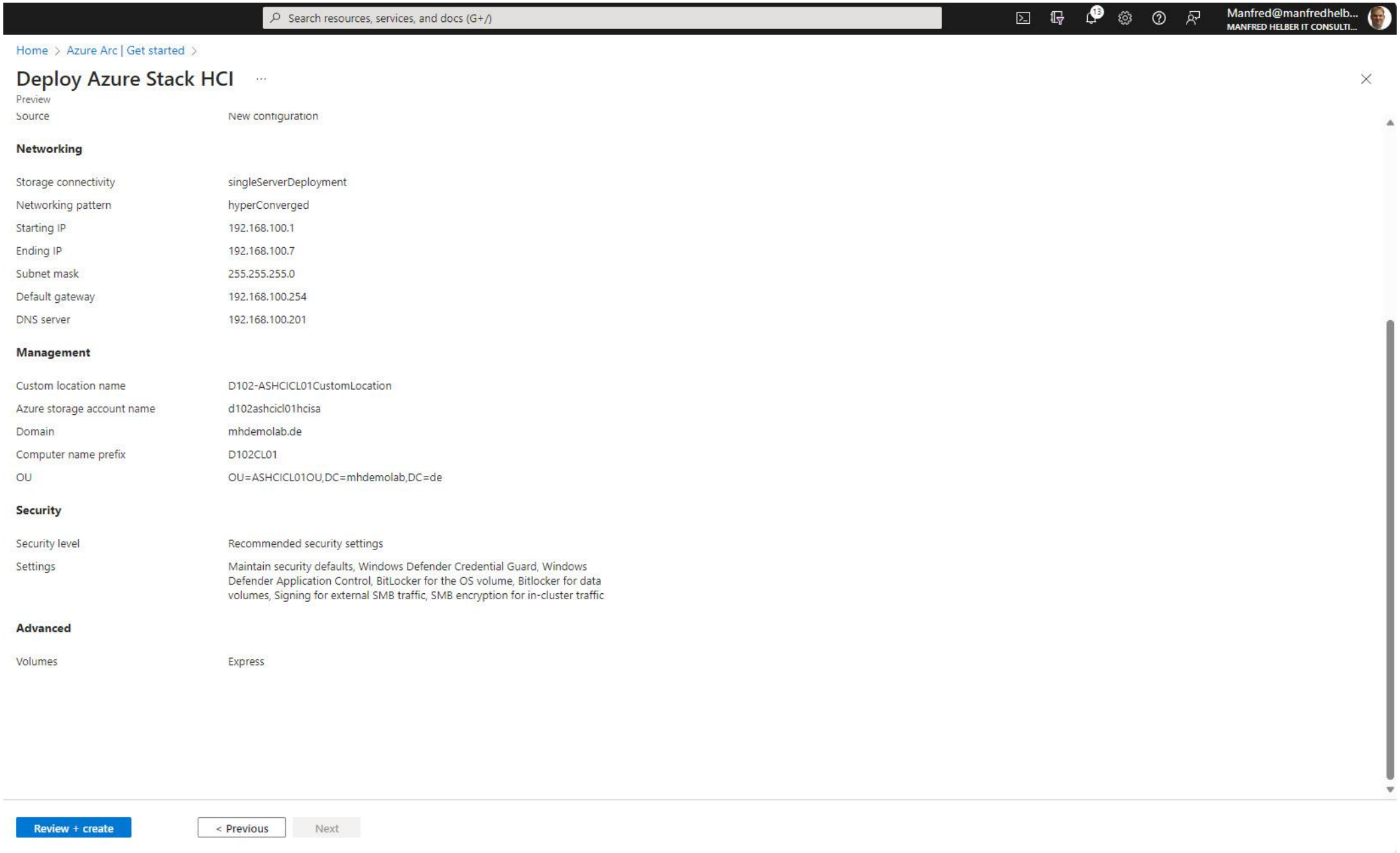

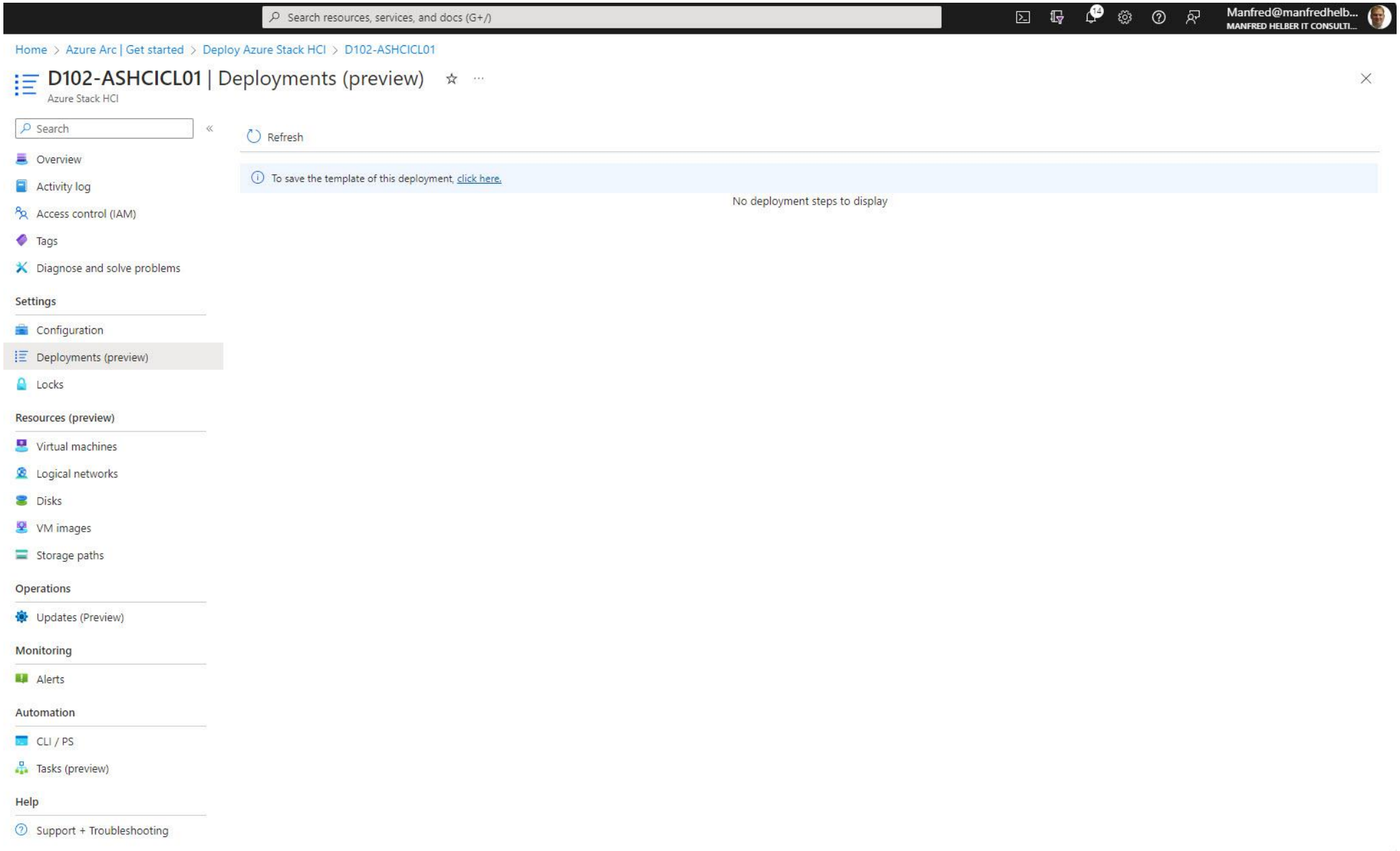

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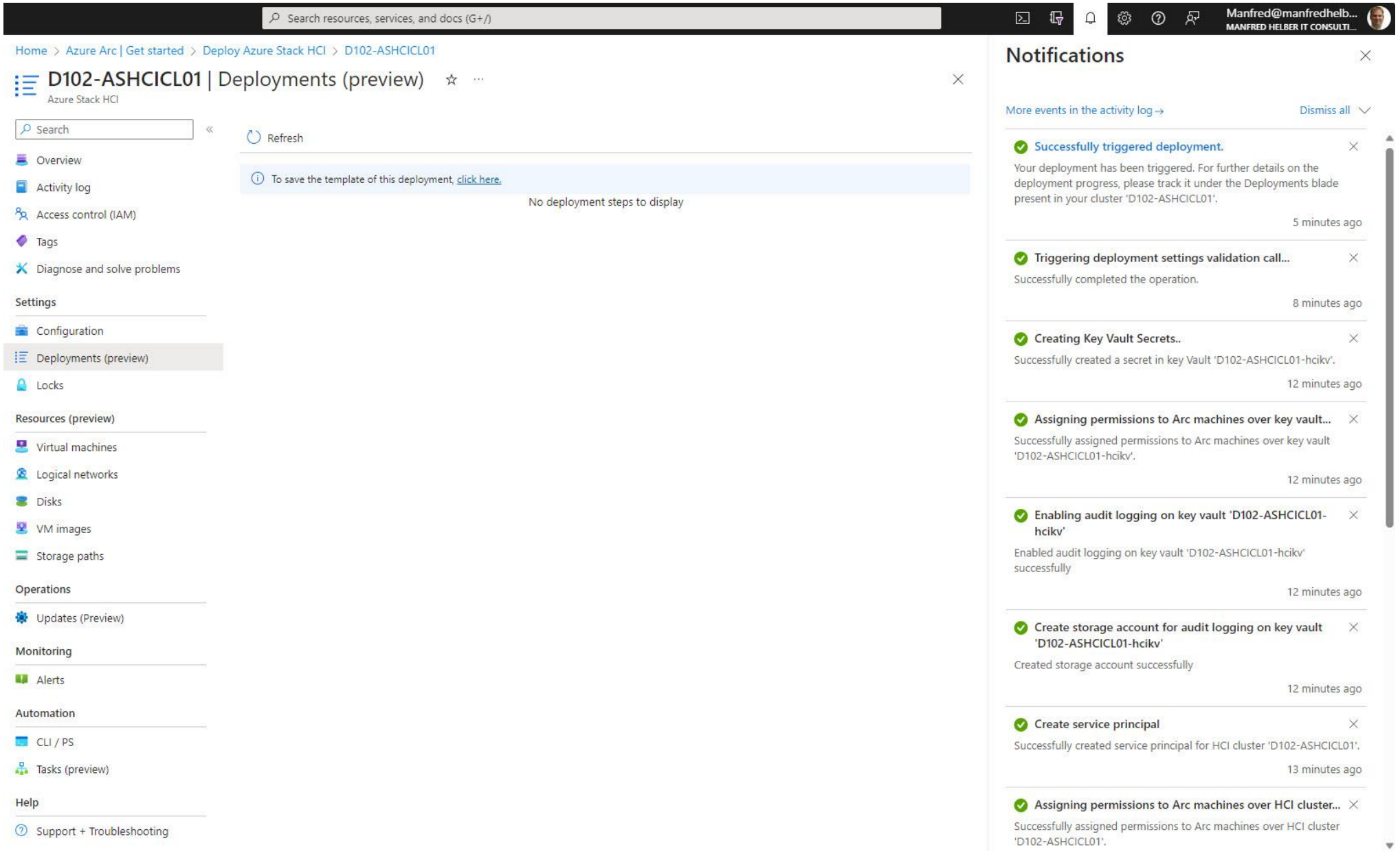

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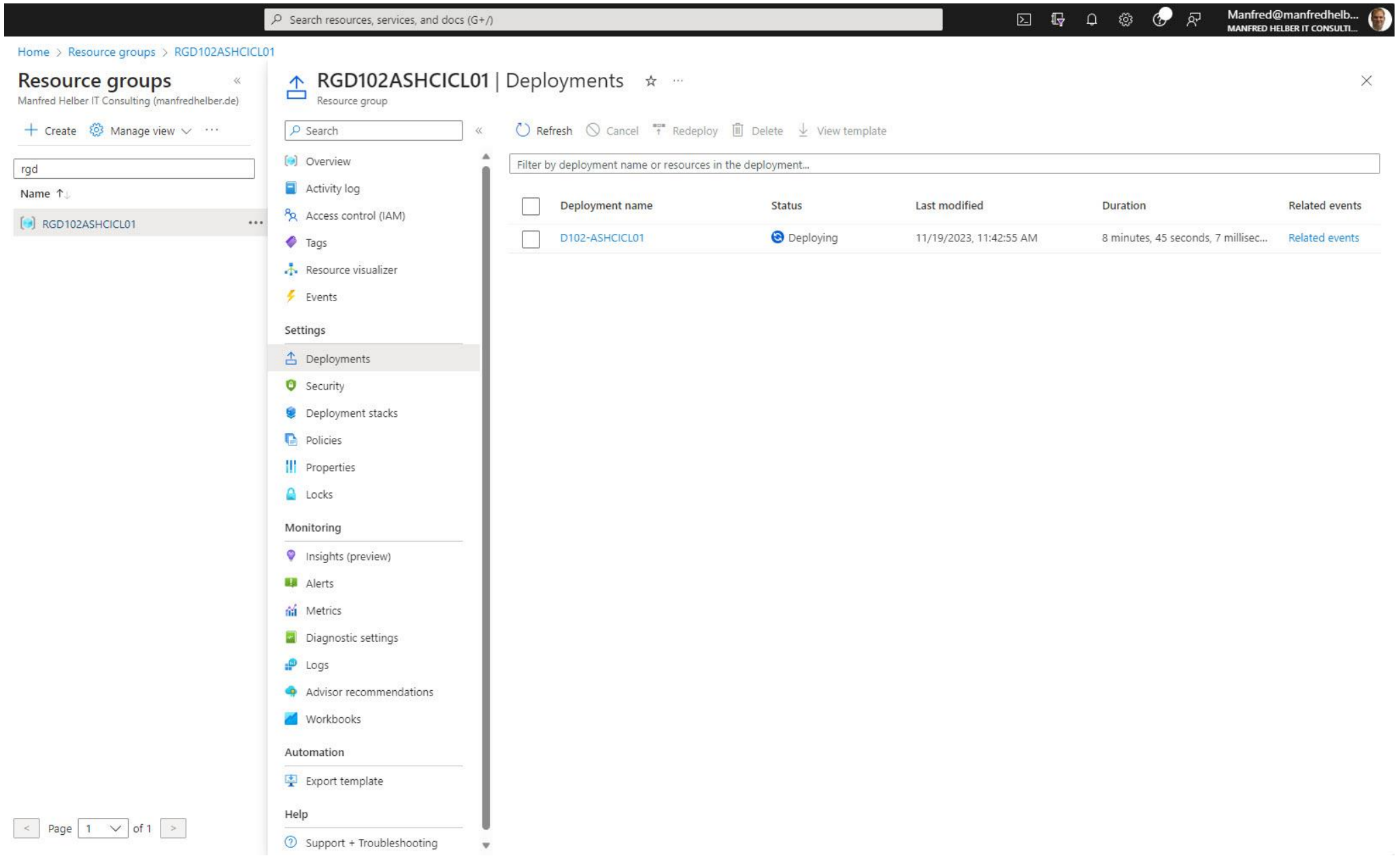

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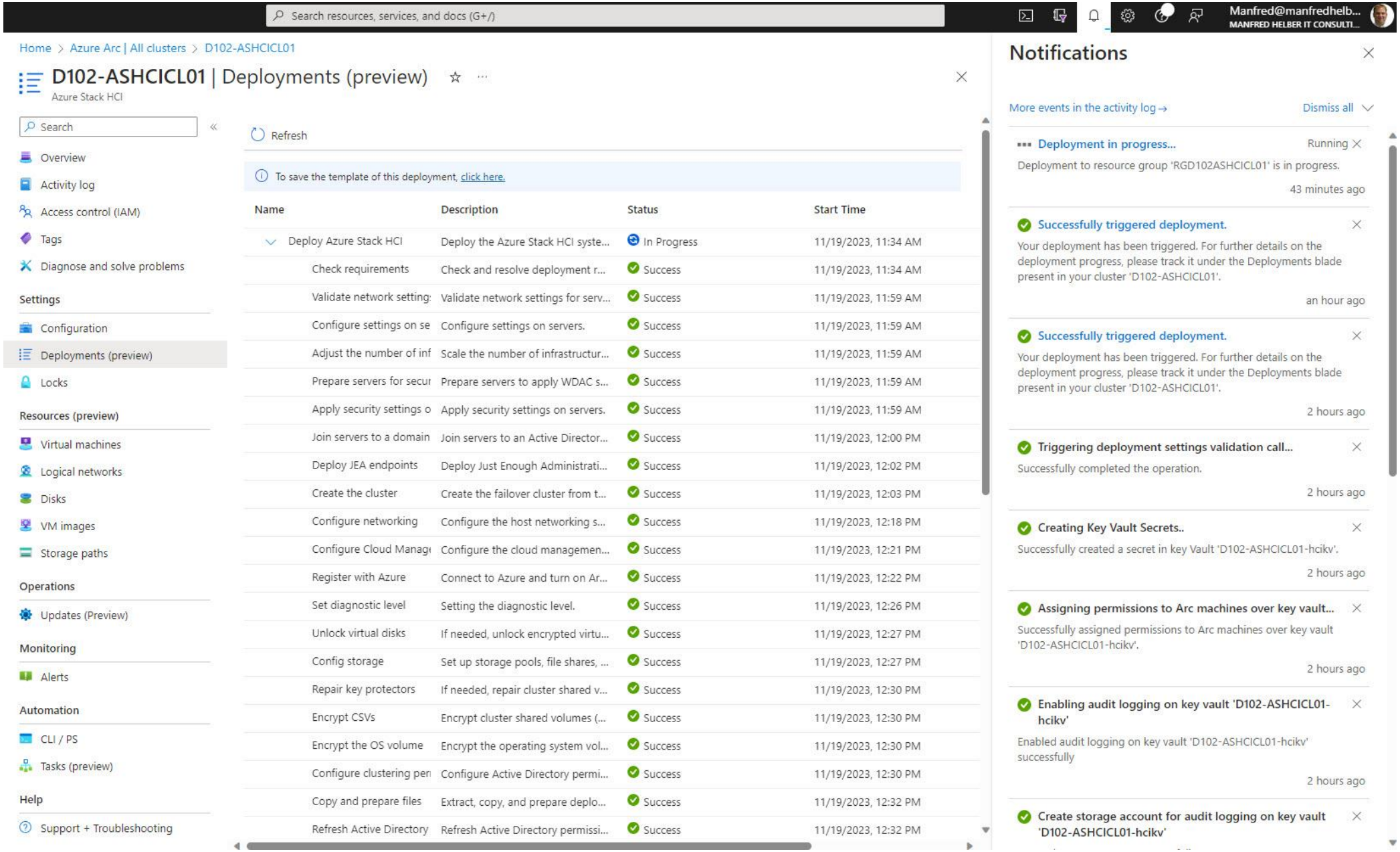

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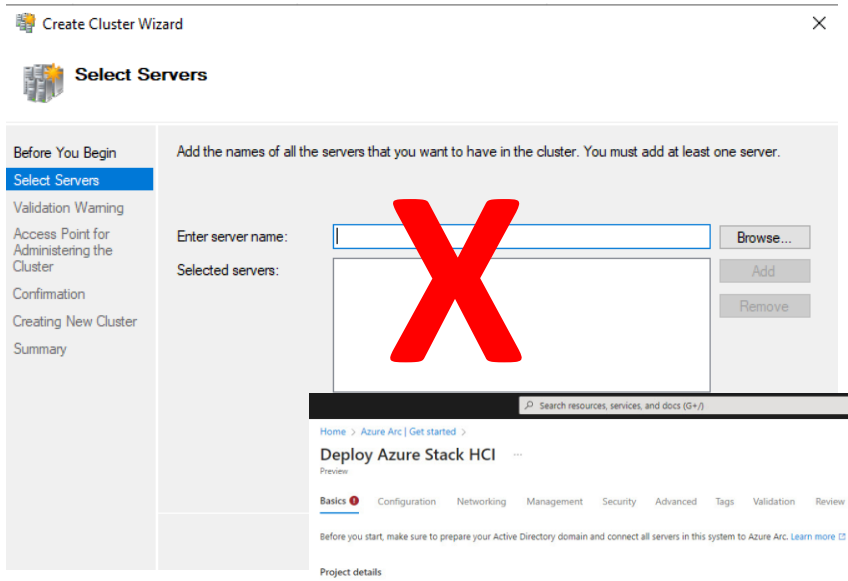
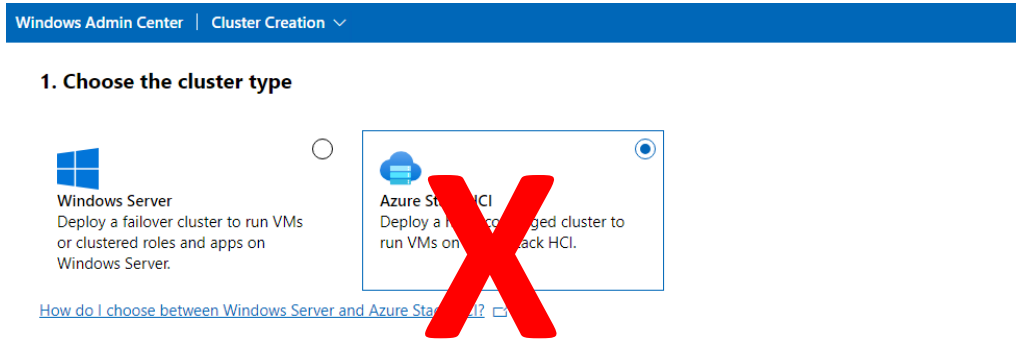
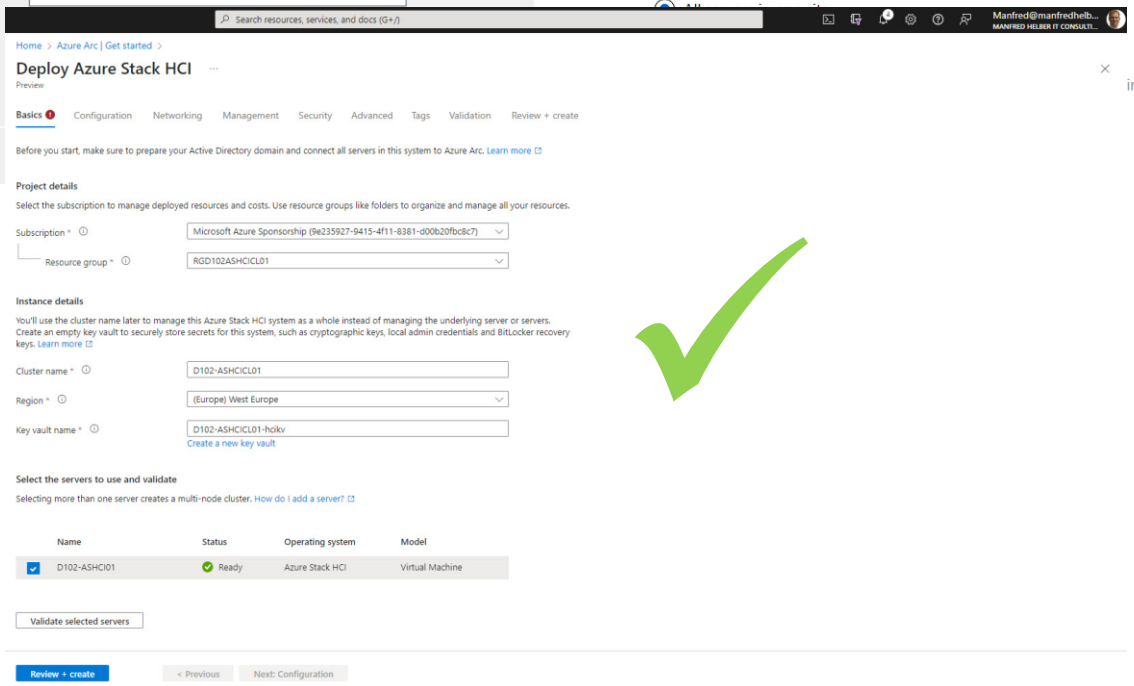
1. Neues Deployment verstehen







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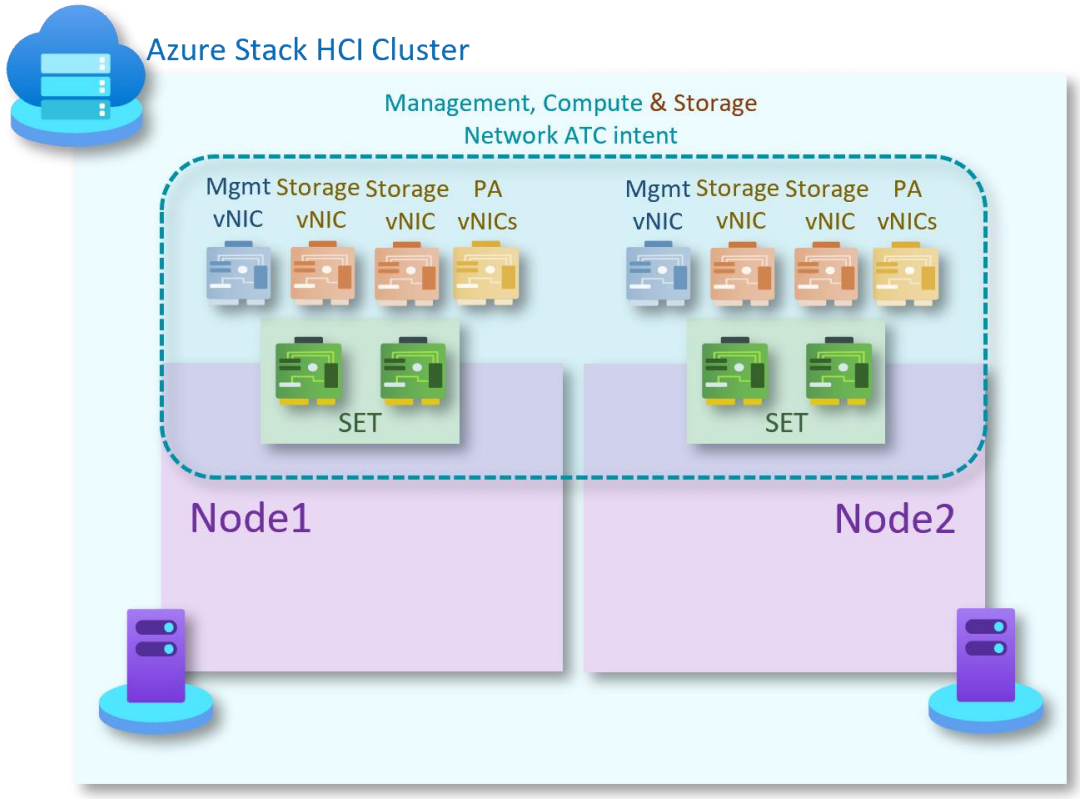
2. Mit Network ATC vertraut machen



Network traffic types

Azure Stack HCI network traffic can be classified by its intended purpose:

- **Management traffic:** Traffic to or from outside the local cluster. For example, storage replica traffic or traffic used by the administrator for management of the cluster like Remote Desktop, Windows Admin Center, Active Directory, etc.
- **Compute traffic:** Traffic originating from or destined to a virtual machine (VM).
- **Storage traffic:** Traffic using Server Message Block (SMB), for example Storage Spaces Direct or SMB-based live migration. This traffic is layer-2 traffic and is not routable.

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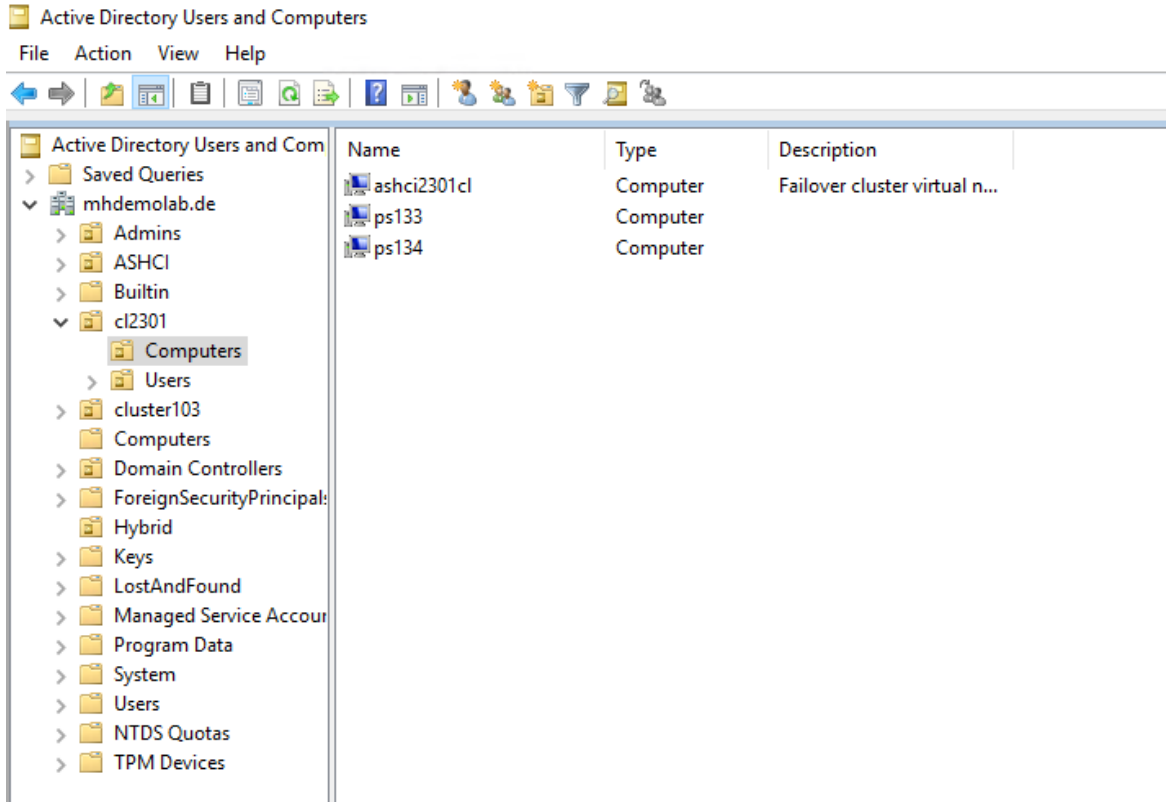
3. AD Vorbereitung



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4. TPM 2.0

```
PS C:\Users\Administrator.MHDEMOLAB> get-tpm


TpmPresent                 : False
TpmReady                   : False
TpmEnabled                 : False
TpmActivated               : False
TpmOwned                   : False
RestartPending             : False
ManufacturerId             : 0
ManufacturerIdTxt          :
ManufacturerVersion        :
ManufacturerVersionFull20  :
ManagedAuthLevel           : Full
OwnerAuth                  :
OwnerClearDisabled         : True
AutoProvisioning           : NotDefined
LockedOut                  : False
LockoutHealTime            :
LockoutCount               :
LockoutMax                 :
SelfTest                   :
```

X

```
PS C:\Users\Administrator.MHDEMOLAB> Get-Tpm


TpmPresent                 : True
TpmReady                   : True
TpmEnabled                 : True
TpmActivated               : True
TpmOwned                   : True
RestartPending             : True
ManufacturerId             : 1314145024
ManufacturerIdTxt          : NTC
ManufacturerVersion        : 7.2.2.0
ManufacturerVersionFull20  : 7.2.2.0
ManagedAuthLevel           : Full
OwnerAuth                  :
OwnerClearDisabled         : False
AutoProvisioning           : Enabled
LockedOut                  : False
LockoutHealTime            : 10 minutes
LockoutCount               : 0
LockoutMax                 : 31
SelfTest                   : {}
```

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Fragerunde

Manfred Helber

Die nächsten Termine

Manfred Helber

Die nächsten Termine

28.02. 10:00 Uhr Termin 3: Azure Stack HCI 23H2 VM Workloads verwalten

Bei Azure Stack HCI 23H2 gibt es umfangreiche Neuerungen im Bereich des VM-Managements über das Azure Portal. In diesem Webcast zeugt der Microsoft Most Valuable Professional Manfred Helber wie das VM-Management über das Azure Portal für Azure Stack HCI 23H2 funktioniert und welche Möglichkeiten sich daraus ergeben.

Inhalte in diesem Webcast:

- Die Rolle der Azure Arc Ressource Bridge für das VM-Management
- VM-Images und Logische Netzwerke verwalten
- Virtual Machines verwalten

Die nächsten Termine

07.03. 10:00 Uhr Termin 4: Azure Stack HCI 23H2 hybride Services nutzen

Mit Azure Stack HCI war von Beginn an die Nutzung von hybriden Services ein wichtiges Thema. Mit Azure Stack HCI 23H2 gibt es nun einige Neuerungen und Erweiterungen im Bereich der hybriden Services. Der Microsoft Most Valuable Professional Manfred Helber zeigt in diesem Webcast die Nutzung der wichtigsten hybriden Services für Azure Stack HCI.

Inhalte in diesem Webcast:

- Monitoring für Azure Stack HCI konfigurieren
- Windows Admin Center über Azure nutzen
- Updates für Azure Stack HCI verwalten

20.03. 10:00 Uhr Termin 5: Azure Stack HCI 23H2 und Azure Virtual Desktop (AVD)

Azure Virtual Desktop ist einer der Azure Services auf Azure Stack HCI zu welchem es eine enorme Nachfrage gibt. Das liegt sicher daran, dass sich durch AVD mit modernen Technologien klassische RDS-Szenarien ablösen lassen. In diesem Webcast zeigt der Microsoft Most Valuable Professional Manfred Helber wie sich AVD auf Azure Stack HCI bereitstellen lässt und wie die User-Experience aussieht.

Inhalte in diesem Webcast:

- Azure Virtual Desktop Grundlagen und Rahmenbedingungen
- Azure Virtual Desktop auf Azure Stack HCI bereitstellen
- Azure Virtual Desktop auf Azure Stack HCI – User Experience

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Vielen Dank!

Manfred Helber

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