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SUSE workloads on Microsoft Azure

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Agenda

Microsoft and SUSE partnership

Collaborative support

Provision SUSE Linux VM in Azure with Terraform

SUSE products for your workloads

Collaboration success stories

Q&A

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Key Highlights

- First optimized Linux Kernel on Azure
- SUSE HPC images to enable InfiniBand interface
- SQL on SUSE Linux Enterprise Server (SLES) 12 SP2
- High Availability with Pacemaker
- Collaborative support

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A Deep Alliance Partnership Dedicated to your Success

SUSE and Microsoft are committed to delivering new innovation for our joint customers that will enhance agility and drive digital transformation.

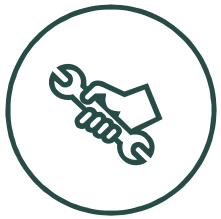
Decades of Collaboration

10+ years – SUSE has been partnering with Microsoft for over a decade to support our joint customers

20 years – SUSE and Microsoft have been working with SAP for 20 years driving enterprise customer success

Enterprise Support Offerings

Seamless support, wherever the case is opened. Long Term Service Pack Support (LTSS) availability for flexibility in scheduling migrations and more time for you to test. Unified system management, 24x7 Linux support for enterprise applications from Microsoft and SUSE. Growing with us is easy using Pay-G pricing and Microsoft Enterprise Agreements.



Engineering and Innovation

SUSE and Microsoft are closely collaborating to enable your SAP environments on Azure with high-availability, optimized tuning and performance, and reliability you can depend on.

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Collaborative Support

Seamless collaborative process between both Microsoft and SUSE to jointly troubleshoot the issue and drive to resolution

On-site SUSE engineer co-located with Microsoft support teams

Strong Governance model and shared goals

Long term vision to completely integrate and automate support experience

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Support Offerings

Usage Model	Support Contact	Escalation Support
BYOS		
PAYG	Microsoft Azure	

SAP HANA Large Instance customers are required to have a Microsoft Premier agreement and SLES for SAP entitlement to support their Mission Critical Workloads

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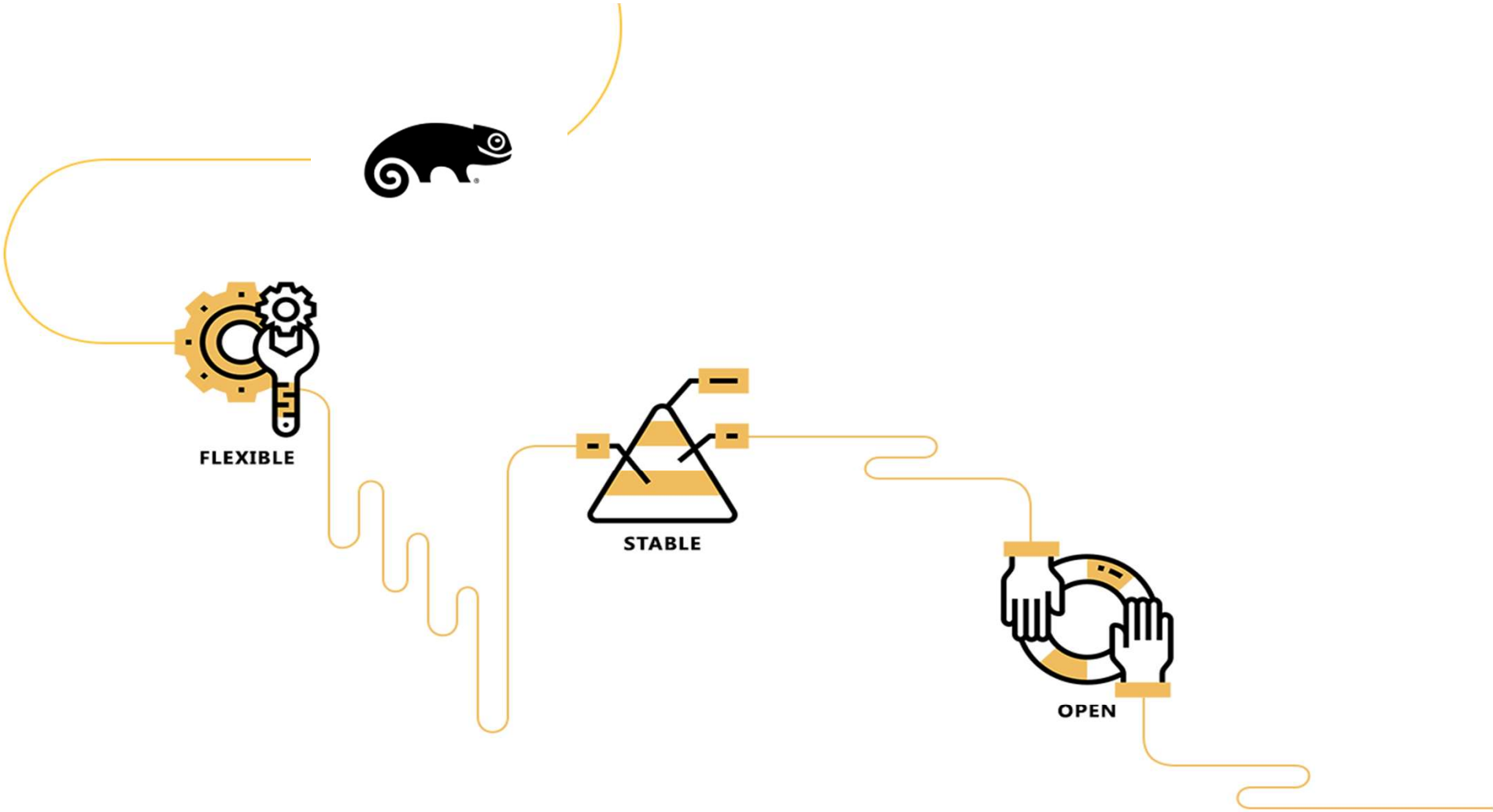
Your vision. Your cloud.

Microsoft Azure

TRUSTED

RESPONSIBLE

INCLUSIVE


FLEXIBLE
STABLE
OPEN

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OS deployment checklist

Review to validate whether you need to build your own image or not

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Azure marketplace SUSE images

To choose either BYOS or PAYG Image

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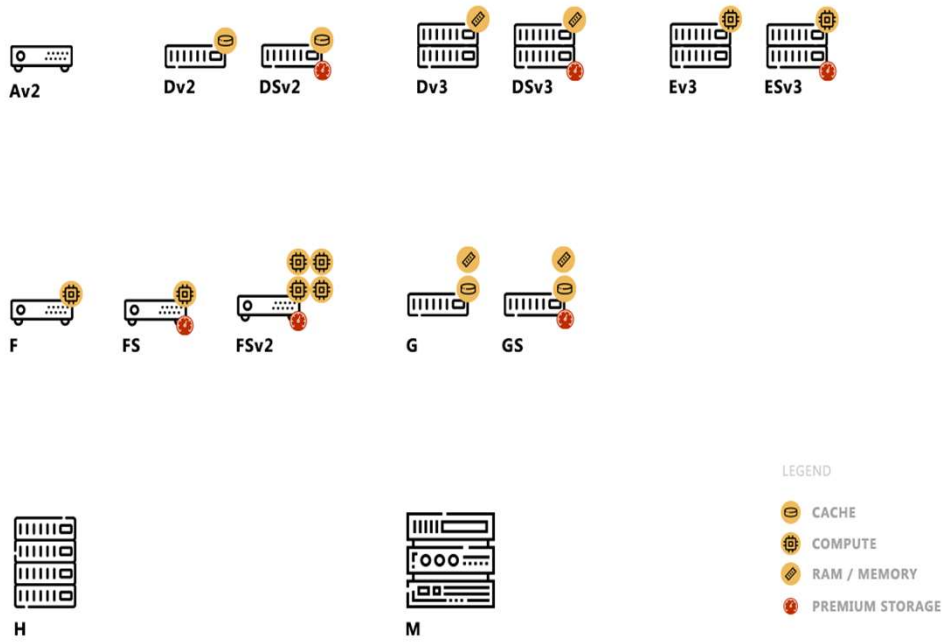
Azure VM Instance Portfolio



Pick the VM size which meets your network and storage requirements

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OS deployment checklist

Recommend to automate your infrastructure deployment

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Automate your infrastructure deployment

Resource manager templates

Terraform

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How to setup terraform access to Azure

To enable Terraform to provision resources into Azure, create an Azure AD service principal.

```
az ad sp create-for-rbac --role="Contributor" --scopes="/subscriptions/xxxx-yyyy-zzzz"

Save appId, password, sp_name, and tenant.
```

The service principal grants your Terraform scripts to provision resources in your Azure subscription.

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Infrastructure deployment using terraform

Create configuration file

```
terraform_suse_deployment.tf
```

```
Note: Configuration files can be in either of two formats: HashiCorp
Configuration Language (HCL), or JSON.
```

Initialize terraform deployment

```
terraform init
```

Preview the action

```
terraform plan
```

Apply terraform plan

```
terraform apply
```

Destroy terraform managed infrastructure

```
terraform destroy
```

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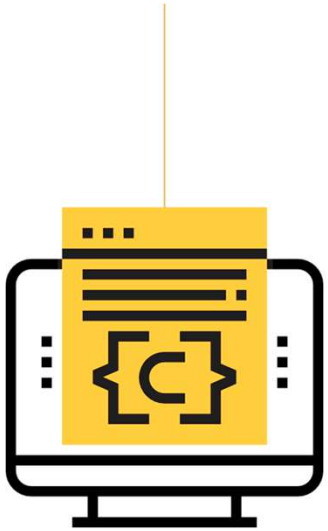

DEMO

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SUSE products

SUSE Linux Enterprise Server for SAP

SUSE Manager

High Availability Extension

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SAP in Azure

Reduce TCO of SAP deployment

Combine bare-metal large instances and VMs with SAP landscape

SAP Certified infrastructure

Single point of contact for resolution management

SAP +

 + Microsoft Azure

=

SUCCESS

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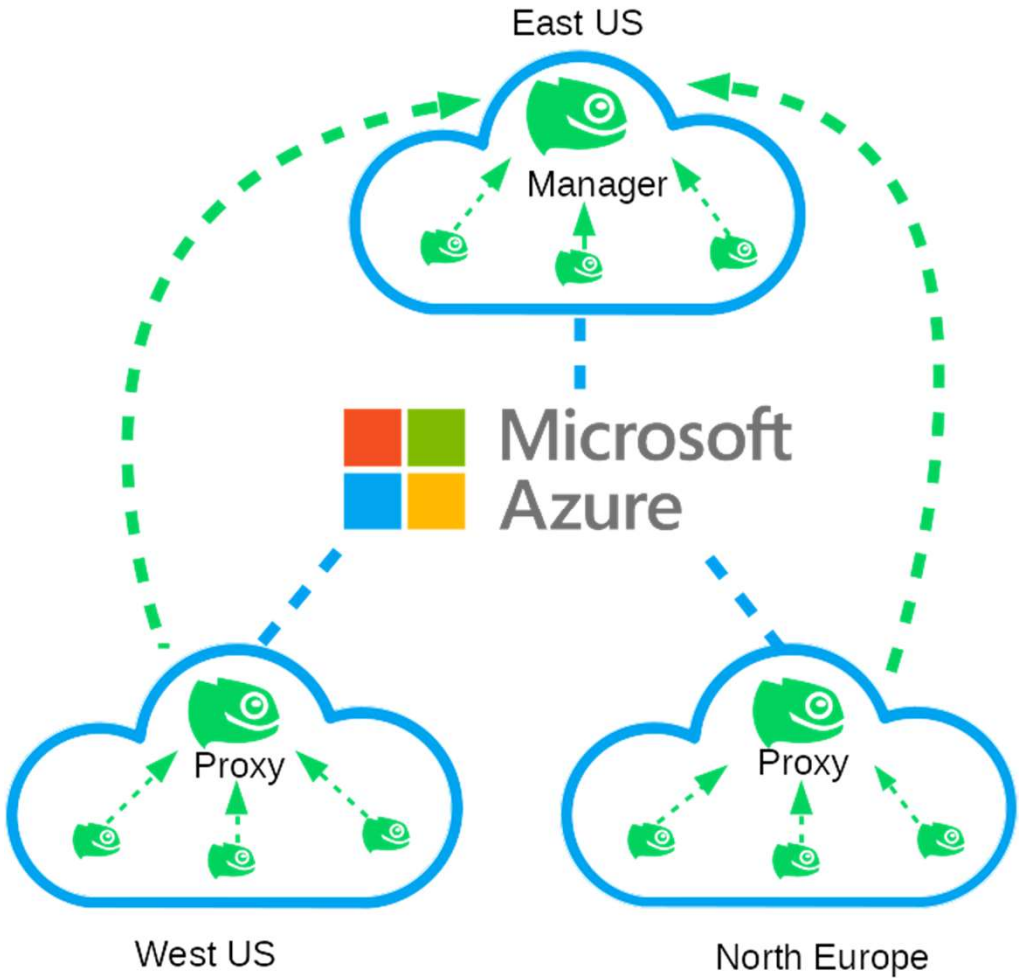
SUSE Manager

Scalable and centralized management for cloud infrastructure

Ability to bootstrap BYOS and PAYG instances

SUSE Manager Server can be on-prem or in cloud

Proxy in local regions keeps software close to instances



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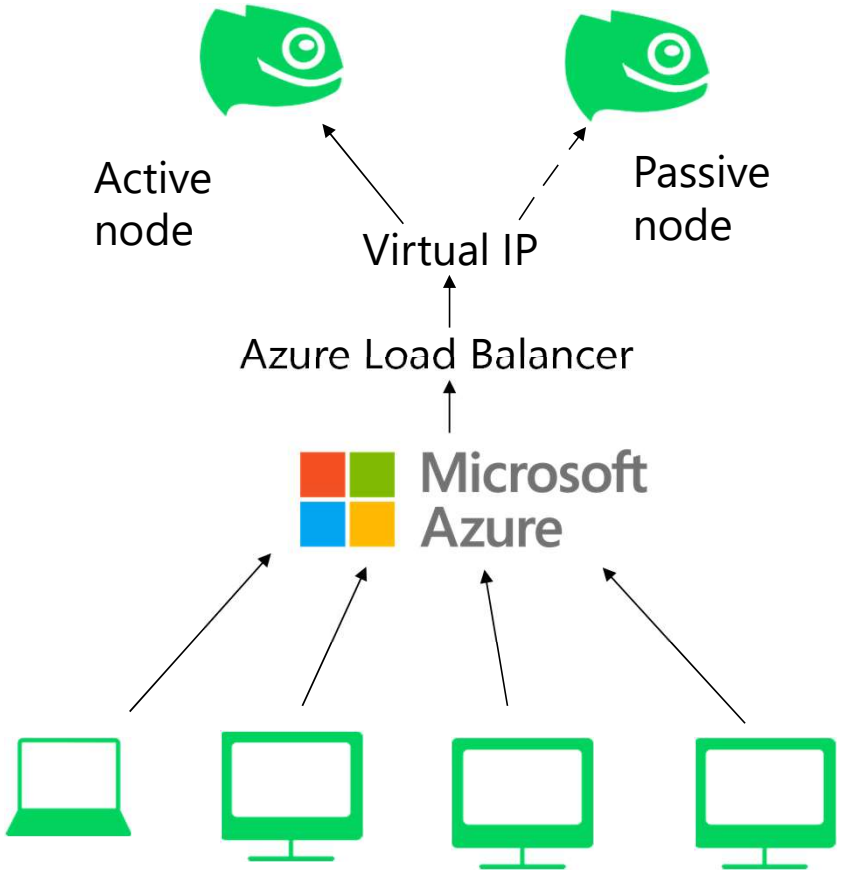
High Availability Extension

Virtualized hardware combined with highly available services through pacemaker help to minimize down time

Available with BYOS images and SUSE subscription with HAE

Azure load balancer + IPaddr2 OCF resource help to automate failover



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Q. But what happens when something goes wrong?

A. Industry leading collaborative support will help!

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Rapid Resolution Time

Defect reported with kernel-azure

Confirmed with support process

Bug filed and problem identified

Fix in KOTD <48 hours after initial contact

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Preventing Rebuild

Engaged by Azure Linux Esc. Team

System not finding bootloader

Found MBR was corrupted (right)

Researched partition boundaries, rebuilt MBR from scratch and reinstalled GRUB

System boots again with data intact

```
grant@grant-opensuse-laptop:~> xxd mbr.img
00000000: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
00000010: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
00000020: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
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000000b0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
000000c0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
000000d0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
000000e0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
000000f0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
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000001c0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
000001d0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
000001e0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
000001f0: 6969 6969 6969 6969 6969 6969 6969 6969  iiiiiiiiiiiiiiii
grant@grant-opensuse-laptop:~>
```

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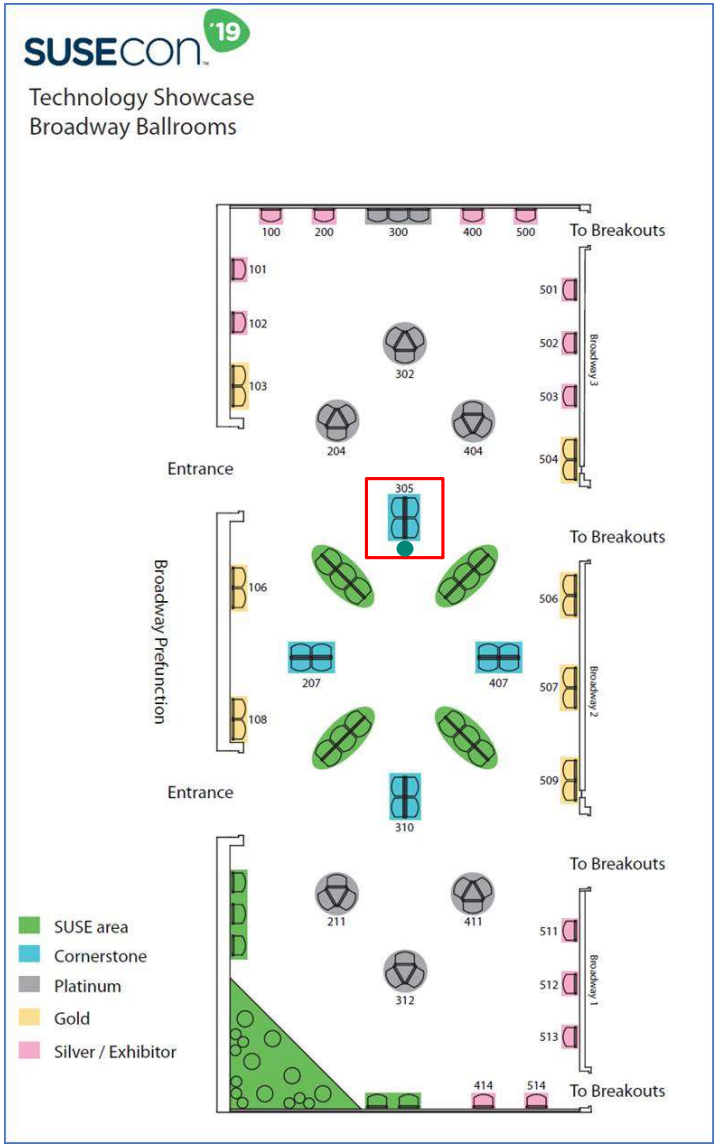
Questions

Microsoft Booth @Expo Floor 305

Come visit us at Microsoft Booth #305
If you have any further questions!

And we've got SWAGs for you :D

Visit Azure.com/Linux
Azure.com/SUSE for more details



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