

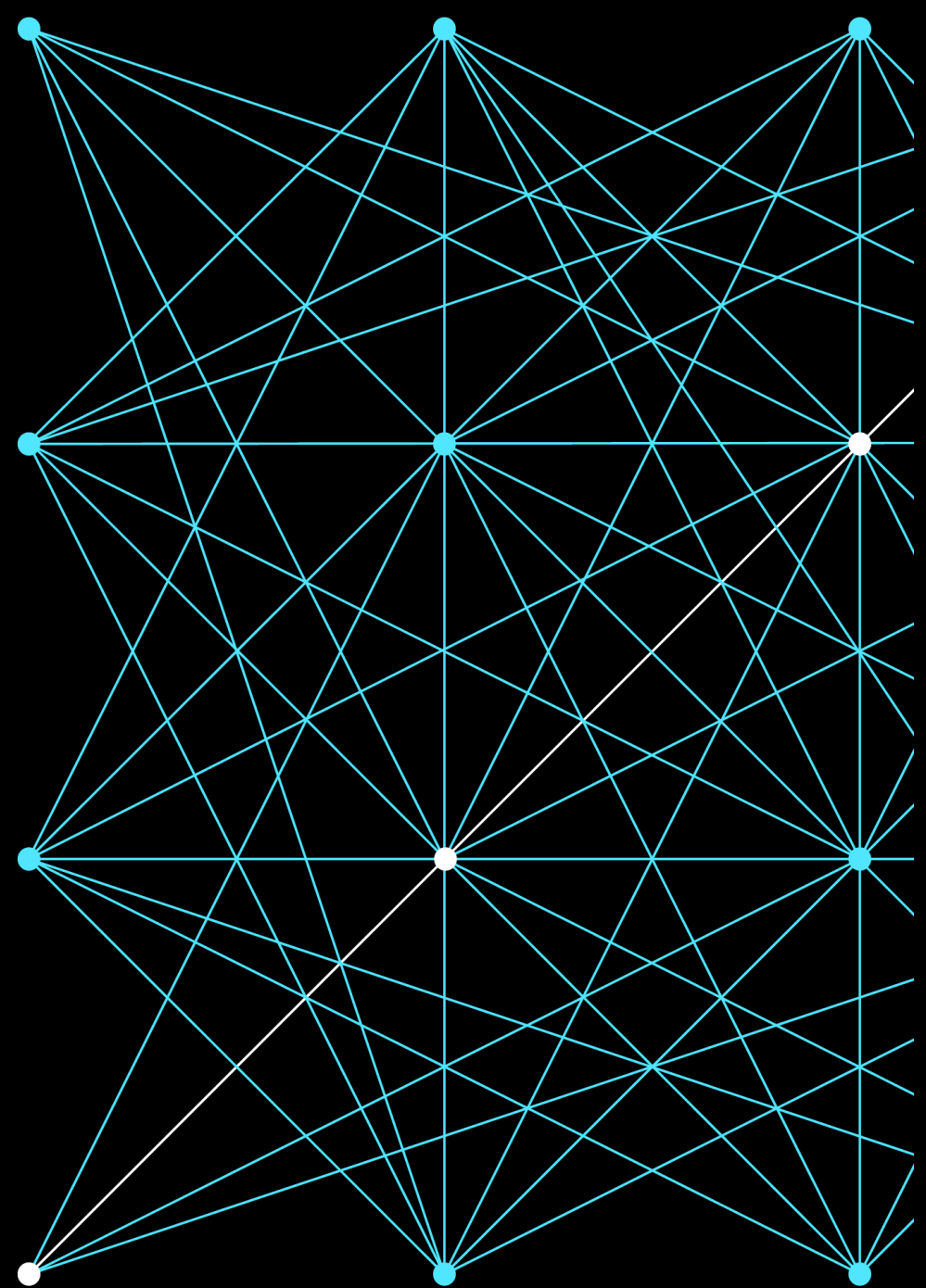


Microsoft + Open Source

Empowering every person and organization to achieve more

Microsoft's journey with Linux

René Moddejongen
Director Open Source & Dev Audience
Microsoft Western Europe HQ



```
[ms@azure ~]$ loves
```

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At Microsoft,
We **Love**
Open Source

Microsoft ❤️ Linux



“

“Judge us by the actions we have taken in the recent past, our actions today and in the future”

”

Open source is the biggest differentiator for organizations

+30%

more innovative

+20%

developer satisfaction and retention rates



Tech companies born with an open source mentality get it. It's our ability to work together that makes our dreams believable and, ultimately, achievable. We must learn to build on the ideas of others"

—Satya Nadella, CEO
Microsoft



Open source is changing software development

> 40%

CIOs have open source as
primary software strategy¹

96%

deployed applications using
open source software²

80–90%

of code in new applications
come from open source²

¹Forrester 2017: *Microsoft CMR, Altoros 2016–2017 trends in Open Source*

²Synopsis 2018: *Open Source Security and Risk Analysis*

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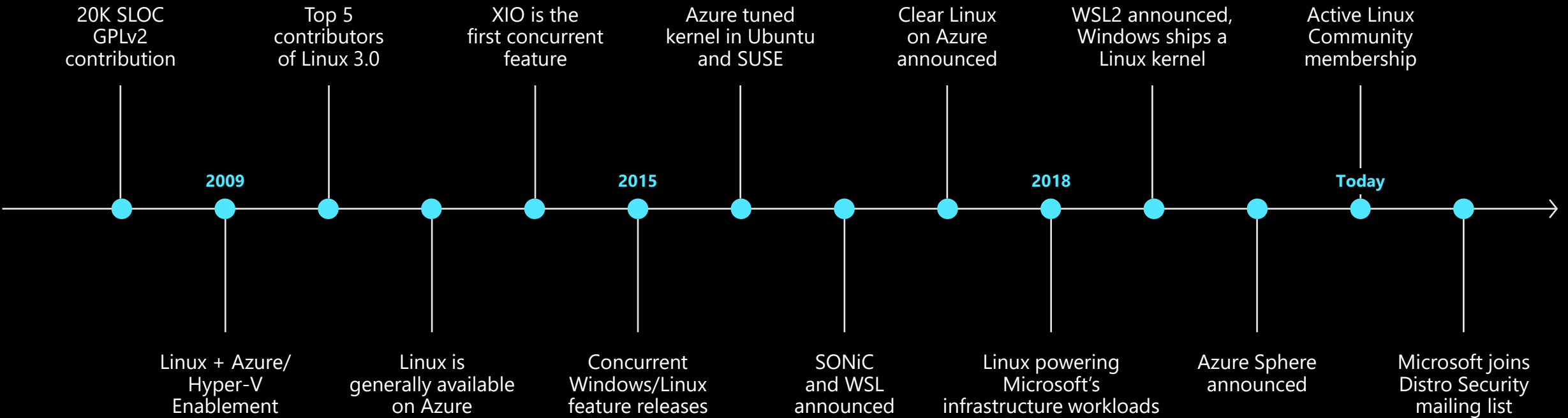
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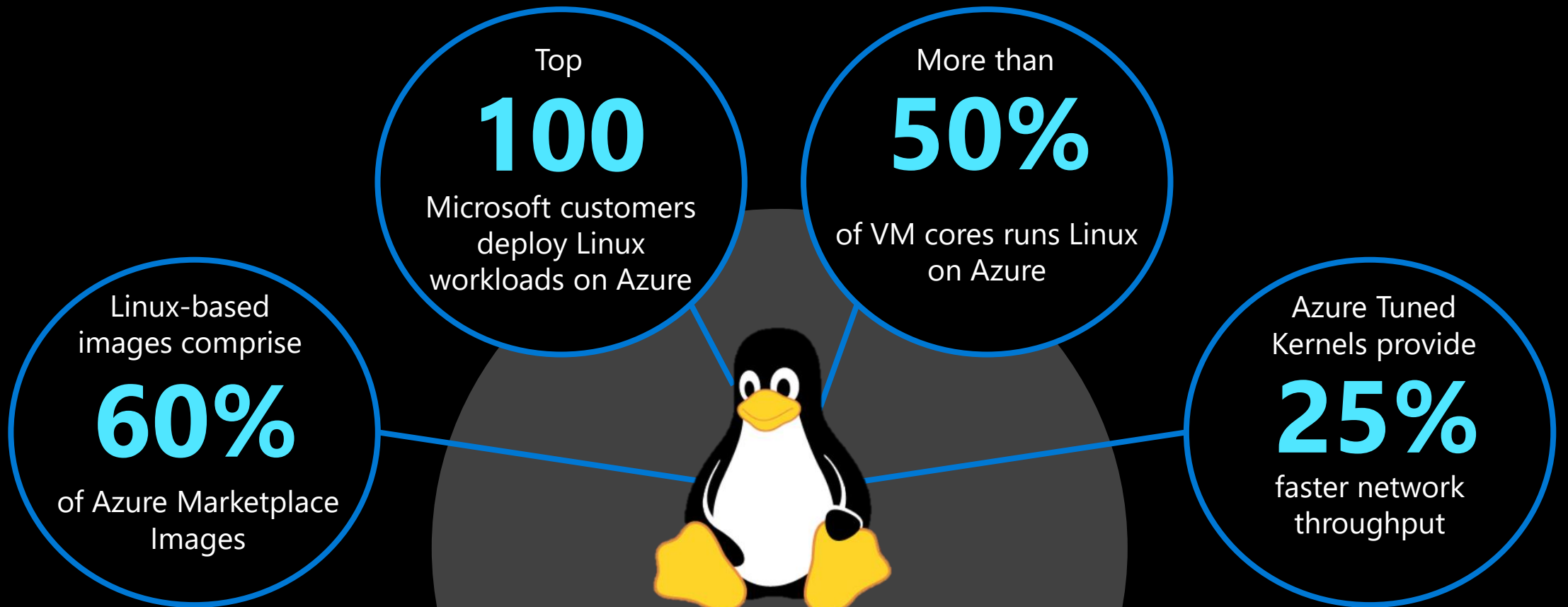
Linux in the Microsoft Cloud

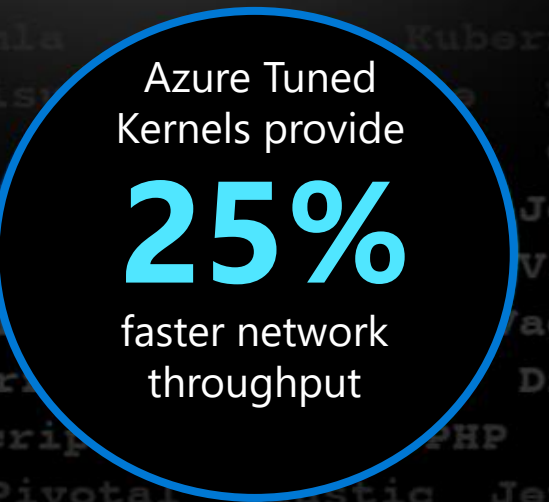
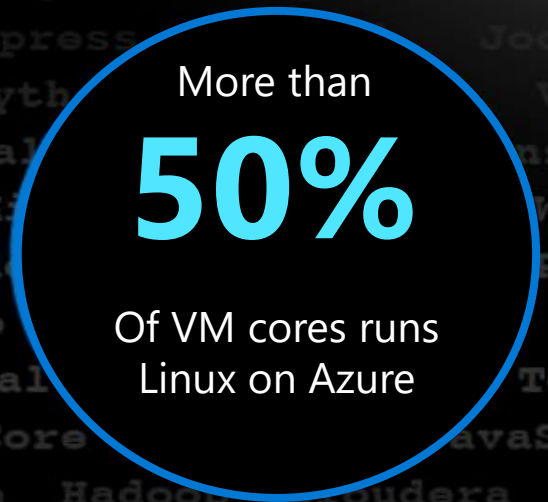
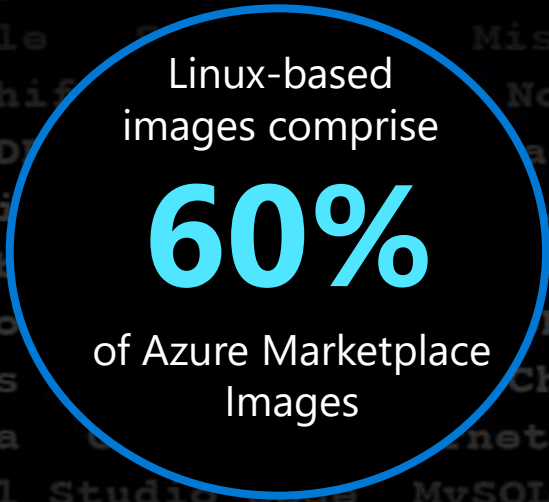
A decade in the making



Did you know?

Linux is the fastest growing platform on Azure





What Linux distributions can I use on Azure?

Microsoft supports all major Linux distributions like Red Hat, SUSE, Ubuntu, Oracle Linux, Debian, CentOS, FlatCar and OpenSUSE

? Did you know FreeBSD is also supported on Azure too?
(although it's not technically Linux)



Azure—best cloud for Linux

> 50%

of VM cores
are Linux

> 60%

of Azure marketplace
images are Linux-based

1/3

of Microsoft's own cloud
usage runs on Linux

Top 100

Microsoft customers deploy
Linux workloads on Azure

Seamless end-to-end Linux on Azure experience



Foundation

- Cloud-init open standards
- Fast VM creation
- Reliability
- High availability
- Performance
- Security



Full-stack view

- Kernel/image building
- Licensing
- Operations
- Image update and patching
- Support & troubleshooting



Workloads

























































- Azure Red Hat OpenShift
- SQL on Linux
- Azure Database for PostgreSQL
- SUSE Cloud Application Platform
- Oracle Interconnect
- DataStax Enterprise

Does Microsoft provide technical support for my Linux-based workloads?

Microsoft provides unique integrated co-located support for Red Hat / SUSE / SAP and supported open source technologies running on Azure



Did you know Red Hat, SUSE and Microsoft support engineers sit together to troubleshoot your technical case?

DevOps	 Nagios [®]	 VAGRANT		 GRUNT				 Xamarin		
Management	 CHEF [™]	 puppet labs	 ANSIBLE	 SALTSTACK			 mist.io	 libcloud		 SCALR CLOUD MANAGEMENT
Applications		 Joomla!	 Drupal [™]		 APPRENDA		 Pivotal			
App frameworks & tools	 php	 nodeJS			 Ruby		 eclipse	 Azure Container Service		
Databases & middleware		 redis	 CLEARDB	 cloudera	 MySQL [™]	 mongoDB.		 Couchbase	 Microsoft SQL Server	 SAP S/4 HANA
Infrastructure			 Red Hat	 SUSE.		 bitnami	 ORACLE [®] LINUX	 FreeBSD	 docker	 OPENSIFT

Microsoft has strong partnerships across the Linux ecosystem.

Various strategic partners include:



Find more on [Azure.com/Linux](https://azure.com/Linux)

Why are Red Hat and Microsoft allies in Open Source?



Beyond our collaboration in the hybrid cloud, **Red Hat and Microsoft have also been working together extensively in open source** communities, notably in bringing flagship Microsoft technologies like [SQL Server](#) and [.NET](#) to Red Hat Enterprise Linux and Red Hat OpenShift.

Paul Cormier
CEO, Red Hat



Microsoft has embraced open source, because it's driven by what I believe is fundamentally what our customers expect for us to do. Which is to say: Doing what's best for both companies' customers. **Microsoft has a heritage here. We were a developer tools company first and now, of course, we are all in on open source.**

Satya Nadella
CEO, Microsoft



Daimler embraces the cloud to innovate faster



We've brought Java, Tomcat, Docker containers, Red Hat Enterprise Linux, SUSE Linux, and many other open-source tools into DevTest Labs, and they all work great."

—Peter Rothlaender, Manager of Cloud Solutions
Daimler AG

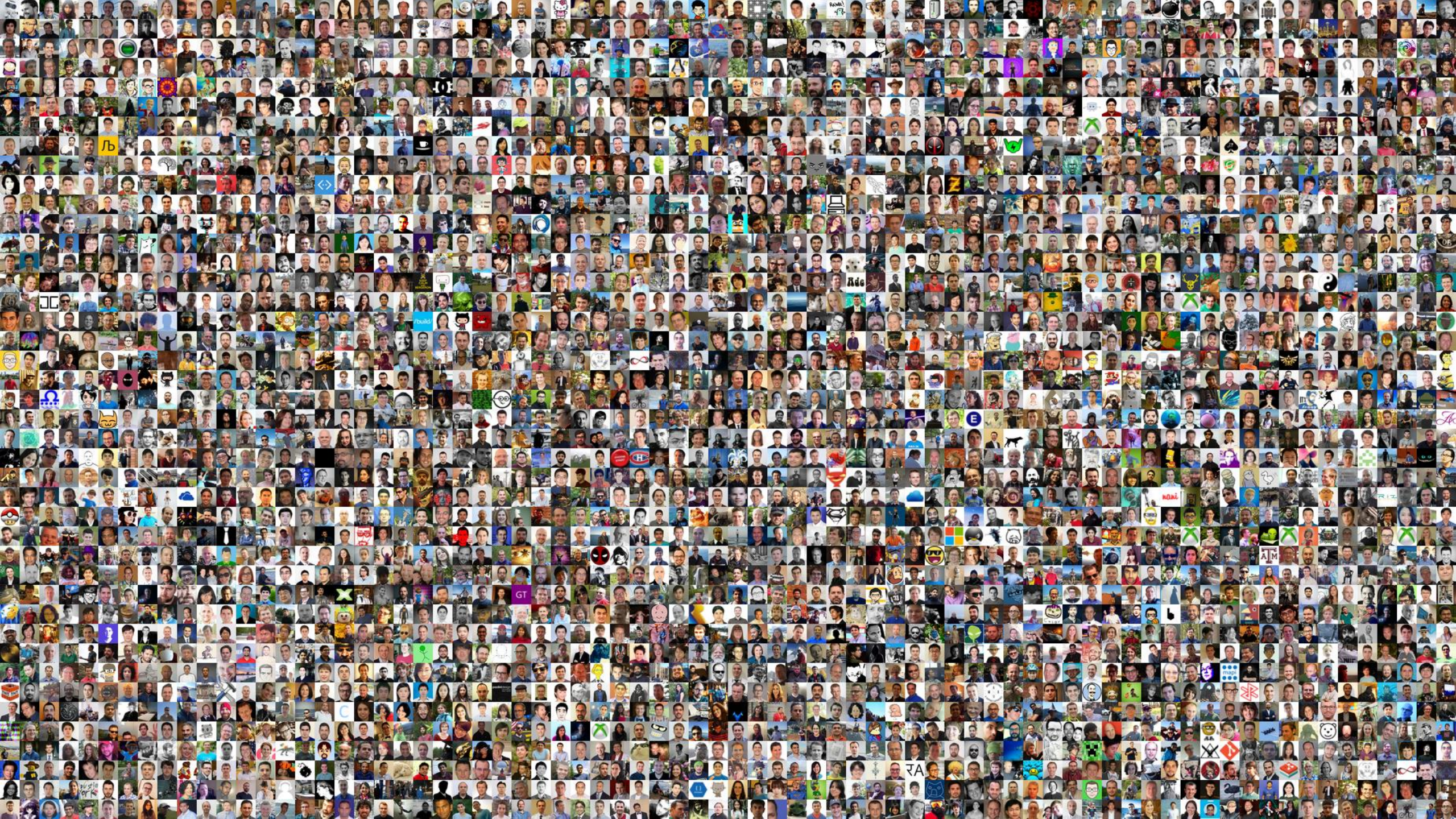


DAIMLER


Building together in open source



Open. Collaborative. Flexible.



Microsoft Open Source Programs Office



Mission

“To enable individuals and organizations to achieve more **through open source**”

Microsoft's Open Source Programs Office makes sure we consume open source safely, provide secure solutions to our customers and participate effectively in open source software

<https://opensource.microsoft.com/program/>

Microsoft's Open Source Software Policy

Company-wide documented policy to make it easy for Microsoft developers to use open source



Using
open source



Contributing
to open source



Releasing open
source software

We share some of our policy publicly on the opensource.microsoft.com site under "Our programs"

Microsoft's contributions to Open Source



Linux

Linux Integration Services
IPE
LISA testing framework
SMB3/CIFS & NFS



Cloud Native

Moby & Kubernetes
Dapr & OAM
Akri
Helm & CNAB
Open Service Mesh



Languages

.NET / C#
Node.js
Python
Rust
Golang
OpenJDK



Data + AI

Spark & YARN
PostgreSQL
Pandas
Tensorflow
ONNX



Web

Bootstrap
Webpack
Babel
Vue.js

Foundations



Alliance for
Open Media



Azure open source ecosystem

Building open solutions jointly with partners, customers, and community

Joint engineering



Integrated identity

Joint operations



Integrated security

Joint support



Integrated billing



Build +
scale =
growth

 Red Hat |  Microsoft





Choice



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Microsoft's journey with Linux

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