Microsoft

Azure for Gaming

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Gaming Industry

Entertainment everywhere
Gone are the days where people played console games on their consoles, PC games on their PCs, and mobile games on their mobile devices.

Game-as-a-service
As the games industry continues to evolve, many studios are moving to embrace a games-as-a-service strategy which creates sticky, high-margin games that depend heavily on cloud-based services such as analytics, multiplayer, player relationship management, performance marketing, and more.

Cloud technologies
Every year, developers push the boundaries of what's possible in gaming – games are becoming more lifelike, more immersive and more ambitious. Historically these cutting-edge experiences were only available on the latest consoles and high-end PCs; they weren't available on lower-powered laptops, tablets or mobile phones. Over the last few years, cloud technology has begun to change that.

Why cloud game development?

Achieve limitless scalability and flexibility

Spend less scaling your games on reliable infrastructure that grows based on what you need. Leverage modern microservice and serverless architectures that address your most demanding games.

Your games, Global.

Provide the best experience for gamers, bringing your games closer to wherever they are, with a global footprint of servers and low latency networks.

Focus on what matters

Unleash your developer team talent on innovation and not on infrastructure management. Build, test and ship code faster and securely to bring the experiences gamers want.

Delight gamers and extend value for your studio

Regardless of whether you're building a single or multiplayer game, the cloud can help you better understand what your players want in real-time so you can better personalize and improve their experience.

Build your games on Azure

The cloud built by game developers, for game developers.

Azure is Global
60+ Azure regions available in over 140 countries

Azure + Xbox = Better Together
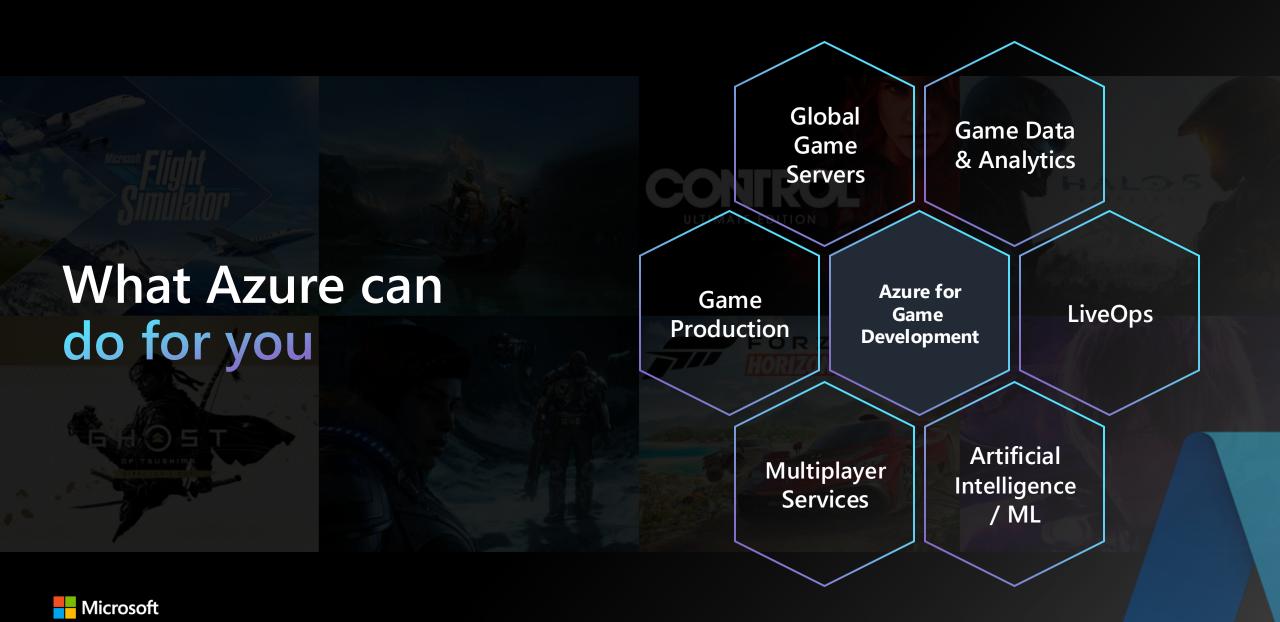Azure's 200+ services benefit from a close partnership with Xbox Game Studios around developing and operating titles using Azure.

Built on Trust
$1B+ invested in security R&D and 3,500 cyber security experts

Open and Extensible
Fully customized and ready-made solutions to build, manage, deploy, and right size game development needs

Committed to open-source
Azure supports all languages and frameworks for game development

Comprehensive marketplace
Azure offers tools and services from Teradici, Parsec, Perforce, Incredibuild, and more

What Azure can
do for you

Global Game Servers

Game Data & Analytics

Game Production

Azure for Game Development

LiveOps

Multiplayer Services

Artificial Intelligence / ML

Microsoft

Azure Playfab

Multiplayer (MPS)

Build and run a real-time
multiplayer game

Server Management Guild
vs Guild Tournaments

LiveOps

Deploy a live event

Message players

Run an offer campaign

Player Data

Data analytics

Prevent player churn

Personalize offers

Daily reporting

Server Hosting · Match Making · Chat · Content Mgmt · Commerce · Game Manager · Profiles · Data Pipeline · Entities · Play Stream

Guilds · Leader Boards · A/B Testing · Cloud Script · Ugc · Messages · Insights · Segments · Pubsub

Completely agnostic

- All major platforms
- All major devices
- All major networks
- All major game engines
- All major app stores

Trusted by many of the world's leading game companies

Tencent 腾讯

ROBLOX

KRAFTON

HELLO GAMES

NEXON

SEGA

MEDIATONIC

UBISOFT

SNK

343 INDUSTRIES

id

THE COALITION

THE INITIATIVE!

inXile ENTERTAINMENT

MOJANG STUDIOS

Playground Games

TURN 10

RARE

COMPULSION GAMES

DOUBLE FINE

OBSIDIAN entertainment

WORLD'S EDGE

UNDEAD LABS

NINJA THEORY

ASOBO STUDIO

Microsoft Flight Simulator:
The Future of Game Development

"The cloud is not just the infrastructure it enables you to bring in. It's all kinds of the tools of humanity, quite frankly, and I know that maybe sounds cheesy, but it's totally true."

—Jorg Neumann, Head of Microsoft Flight Simulator, Microsoft

Microsoft

True Topography | Air Model & Weather | Visual Fidelity & VFR | Multiplayer

Azure Compute | Azure DevOps | Azure Bing Maps

Real Time Air Traffic, Navigation Data, and Smooth Skies

Azure AI

Accounts management | In game Store | Analytics | Multiplayer

Azure PlayFab
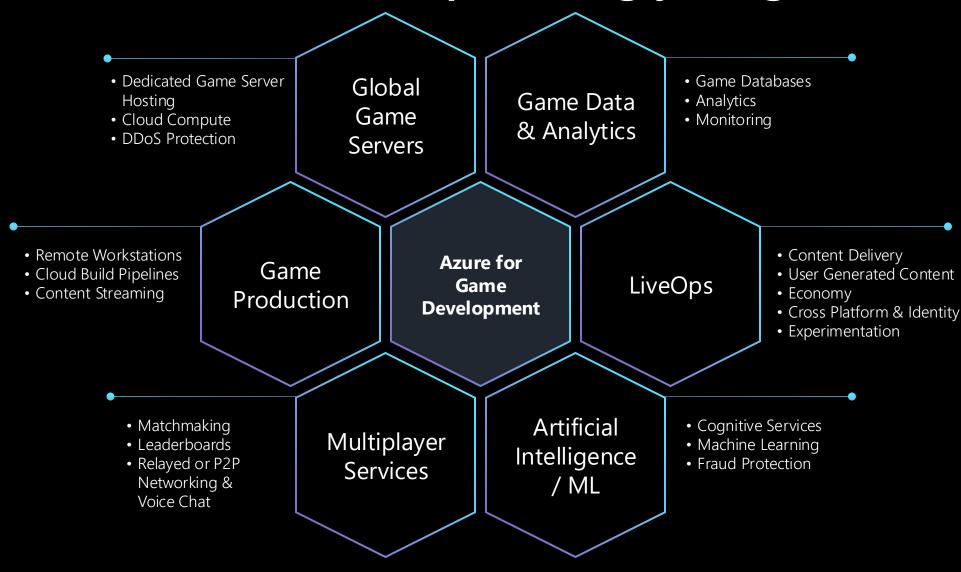
Azure services empowering your games

Global Game Servers
- Dedicated Game Server Hosting
- Cloud Compute
- DDoS Protection

Game Data & Analytics
- Game Databases
- Analytics
- Monitoring

Game Production
- Remote Workstations
- Cloud Build Pipelines
- Content Streaming

Azure for Game Development

LiveOps
- Content Delivery
- User Generated Content
- Economy
- Cross Platform & Identity
- Experimentation

Multiplayer Services
- Matchmaking
- Leaderboards
- Relayed or P2P Networking & Voice Chat

Artificial Intelligence / ML
- Cognitive Services
- Machine Learning
- Fraud Protection

Microsoft

Game Production on Azure

Remote Workstations

Create games anywhere, anytime, with no compromises

- Reduce latency for artists & designers
- Enable remote game playing
- Get performance-intensive game engines and software

Parsec

TeradiciCAS

Game Production

Cloud Build Pipelines

Focus on game development, not version control

- Improve build times
- Seamlessly handle remote sources & version control
- Optimize cost for large binary files and data transfer

Perforce

Incredibuild

Content Streaming

Achieve near zero latency and picture-perfect access to your games

- Stream to varied devices and end-points with near zero latency
- Get customizable UX for Target Platform
- Optimize hardware setup costs

Unreal Engine

Parsec

Microsoft

THE
COALITION™

Microsoft

Global Game Servers on Azure

Dedicated Game Server Hosting

Dynamically scale dedicated game servers globally

- Get closer to players with more global regions than any other provider
- Follow the demand curve for your player traffic and auto-provision servers
- Deliver low-latency, highly-reliable, real-time multiplayer gameplay

Global Game Servers

Cloud Computing

Build custom global, scalable, and secure game server solutions

- Choose from a huge variety of CPU, GPU and RAM options to suit your performance needs and budget
- Leverage modern game development architectures through microservices and serverless technologies
- Address custom needs such as cloud bursting scenarios

DDoS Protection

Protect your gaming infrastructure with a unique state-of-the-art game security solution

- Protect against DDoS attacks that impact highly sensitive latency experiences
- Get always-on monitoring client to server traffic
- Get tokenized identification of player traffic

Featured Solutions

Azure PlayFab

Azure VMs, Scale sets
Azure Kubernetes Service
Azure Container Apps
Azure App Service
Azure Functions

Azure Inline DDoS for Gaming

■■ Microsoft

Microsoft

Multiplayer Services on Azure

Matchmaking

Multiplayer Services

Leaderboards

Peer to Peer Networking & Voice Chat

Build a powerful matchmaking solution into your games, the easy way

- PlayFab Matchmaking offers a simple, yet powerful system for user discovery
- Powered by proven capabilities of Xbox Live's SmartMatch

Azure PlayFab Matchmaking

Take engagement even further

- Easily set up recurring tournaments that get players coming back to try and get the highest scores
- Implement stats that motivate player to improve their ranking via global and social leaderboards
- Celebrate top ranked player through ad-hoc or automatic prize awards

Azure PlayFab Leaderboards

Offer low-latency, secure and reliable chat and data communication for your game's players

- Save time, costs and resources standing up with a turnkey solution by PlayFab
- Offer inclusive experiences with voice transcription and speech synthesis from text
- Well-suited to power voice and text communication for social gaming experiences

Azure PlayFab Party

Microsoft

Game Data & Analytics on Azure

Game Databases

Game Data & Analytics

Analytics

Monitoring

Focus on Game Development not database management

- Power your games with a rich set of turnkey data capabilities to help you focus on developing the experiences players love
- Get the platform and tools for data analytics, storage, processing, and exports to confidently operate your games

Know more about what your players want, segment and tailor-fit their experiences

- Understand daily engagement and revenue from your players , adapt your strategy and reach.
- Create groups of players based on their player properties.
- Get an eagle-view of your most important metrics for engagement and monetization through valuable reports

Maximize the availability and performance of your games, respond to events and issues real-time

- Proactively identify issues to quickly resolve constraints that may impact your games
- Support operations at scale with smart alerts and automated actions
- Extend on-premises and cloud telemetry from a single pane of glass

PlayFab Data
Azure SQL
Azure Cosmos DB
Azure MySQL
Azure Cache for Redis

PlayFab Analytics
Azure Synapse
Azure Databricks
Azure Data Explorer

Azure Monitor

Microsoft

THE WALKING DEAD NO MAN'S LAND

Next Games

Microsoft

LiveOps on Azure

Economy

Content Delivery

Deliver relevant content and messaging through a global and reliable network

- Engage your player community and keep them coming back for more through news broadcasting, email, push notifications in real time and more
- Rapidly deliver high-bandwidth content cached across the world; accelerate dynamic content through CDN network optimizations

PlayFab Engagement
PlayFab Catalogs
Azure CDN

LiveOps (Game Operations)

User Generated Content

Empower players to create

- Build an engaging creator community around your title in-no-time with an out-of the box solution by PlayFab (preview)
- Integrate easily with your own in-game experiences
- Enable content moderation, search capabilities and reporting services to empower players to keep quality high

PlayFab UGC

Profiles & Identity

Experimentation

Try frequently, learn often, optimize faster

- Identify the best strategies for your game by allowing multiple concurrent experiments, ensuring statistical trustworthiness
- Compare different versions of game configurations, pricing models, and outreach
- Determine the best variation for your title's goals (engagement, monetization, retention, etc) across targeted player segments

PlayFab Experiments

Microsoft

Sea of Thieves

Microsoft

AI / ML on Azure

Cognitive Services

AI / ML

Machine Learning

Fraud Protection

Add intelligence to your games, understand sentiment, moderate content and provide inclusive experiences

- Easily add voice and text communication to your game; add speech-to-text, text-to-speech and translation features to reach more players
- Detect offensive content, discover player behavior, and identify toxicity through intelligent capabilities infused by AI

**Two Hat Community Sift
Azure Cognitive Services**

Know what your players are going to do before they do it

- Predict future trends, forecast churn, lifetime value and more
- Automate fraud detection and prevent cheating with specific pattern detection
- Innovate faster -without a data science background-, thanks to the capabilities of Azure Machine Learning

Azure Machine Learning

Your intelligent guard that protects your games from fraud

- Adaptive Artificial Intelligence continuously learns to protect you against payment fraud, bots, account takeover, returns and discounts fraud

Dynamics 365 Fraud Protection

Microsoft

Achieve more, build your games on Azure

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Introducing ID@Azure

ID@Azure exists to make you successful using cloud services

Develop Faster

Free services to help you validate the technology and start building sooner

Work Smarter, Not Harder

Curated educational resources for all levels of cloud experience

Support along the journey

Support and expertise direct from Microsoft's cloud + gaming experts

Your Journey in the Cloud Starts Today at azure.com/id

Microsoft

Microsoft Azure + Rock Star Life Simulator

Microsoft ❤️ Game Developers

Microsoft

Microsoft
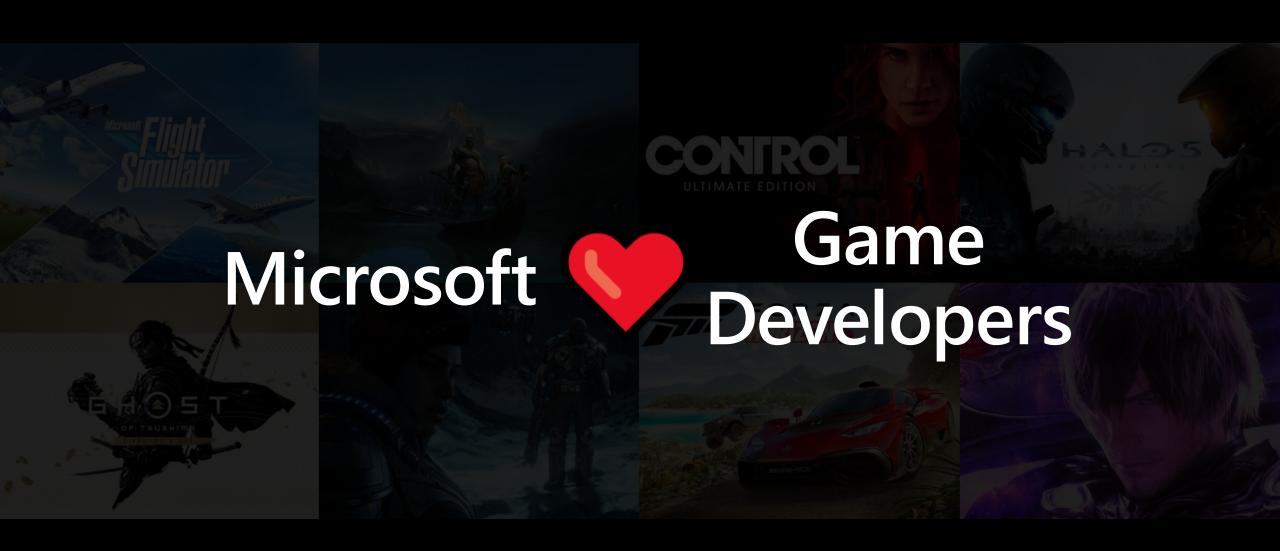
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