



AWS  
re:Invent

WIN307

# Manage Windows instances at scale with Systems Manager

Brian Beach

Principal Solutions Architect  
Amazon Web Services

Minoo Duraipandy

Sr. Partner Solutions Architect  
Amazon Web Services

# Agenda

Presentation 10 minutes

Challenges 1-4 ~25 minutes each

Wrap-up 10 minutes

# AWS Systems Manager

# Cloud management challenges

Managing cloud and hybrid environments using a traditional toolset is complex and costly



Traditional IT toolset  
not built for cloud-  
scale infrastructure



Maintaining  
enterprise-wide  
visibility is challenging



Deploying multiple  
products is a  
significant overhead



Licensing costs  
and complexity

# Customer challenges



Operate safely and  
securely at scale



Map resources to  
applications and  
environments



Diverse set of  
tools for managing  
hybrid cloud



Complex licensing  
and hard to  
manage the  
management  
infrastructure



Ability to build  
custom solutions  
to meet specific  
business needs

# Systems Manager capabilities



Resource Groups



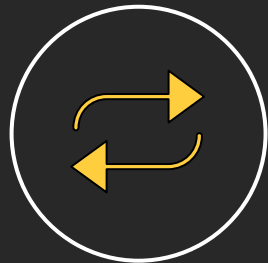
Patch Manager



State Manager



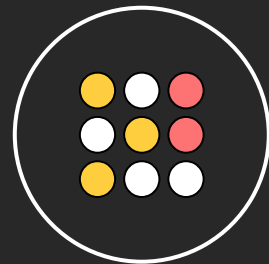
Run Command



Automation



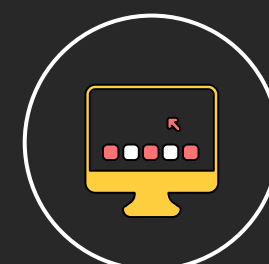
Maintenance Window



Inventory



Parameter Store



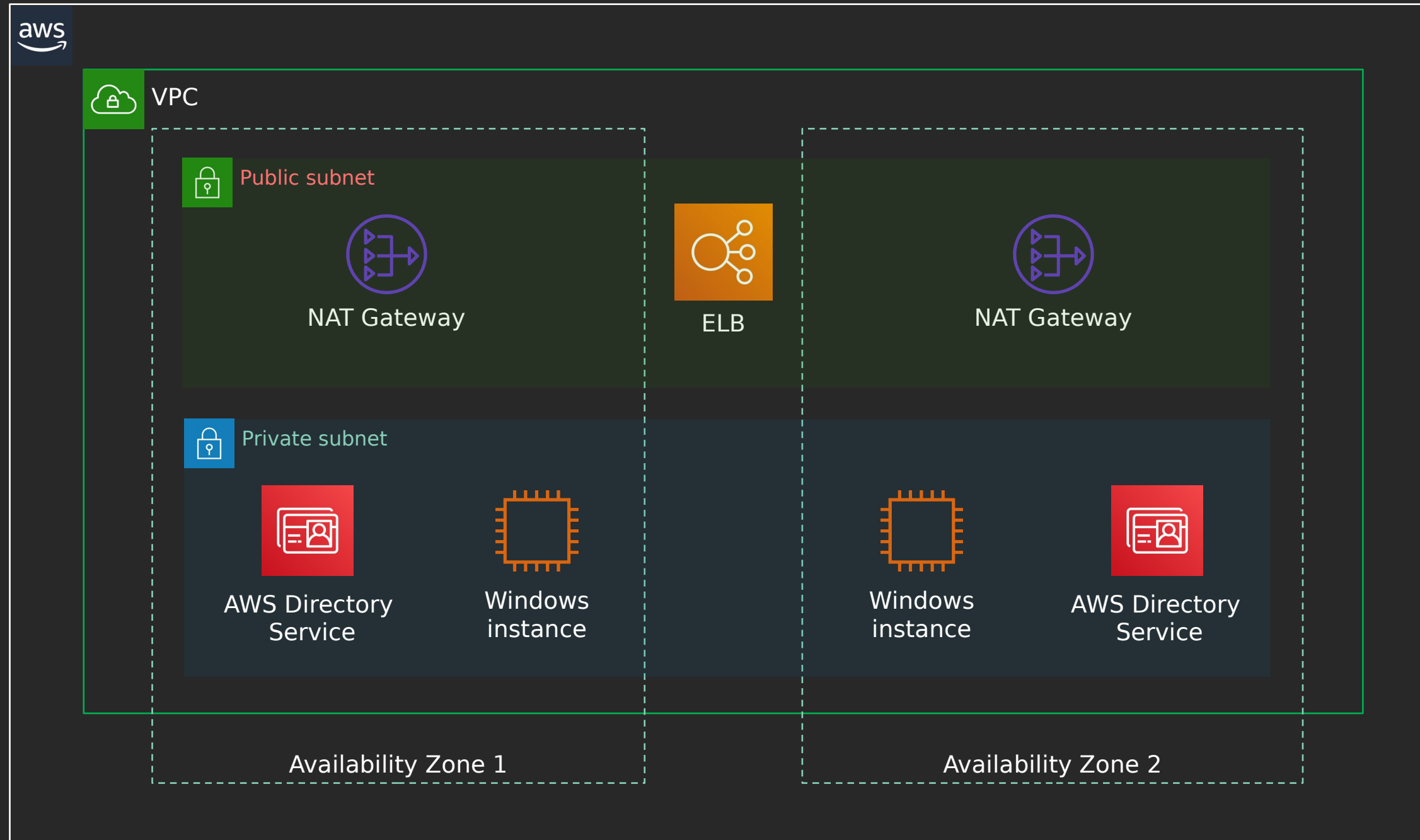
Session Manager



# Challenges



# Application architecture



# The application

```
<%@ Page Title="" Language="C#"
Trace="true"%>
```

## Request Details

<b>Session Id:</b>	4q5d2zjxmstsfgbdbckxnmyh	<b>Request Type:</b>	GET
<b>Time of Request:</b>	9/29/2019 10:34:18 AM	<b>Status Code:</b>	200
<b>Request Encoding:</b>	Unicode (UTF-8)	<b>Response Encoding:</b>	Unicode (UTF-8)

## Trace Information

Category	Message	From First(s)	From Last(s)
aspx.page	Begin PreInit		
aspx.page	End PreInit	0.000012	0.000012
aspx.page	Begin Init	0.000018	0.000007
aspx.page	End Init	0.000024	0.000006
aspx.page	Begin InitComplete	0.000029	0.000005
aspx.page	End InitComplete	0.000034	0.000005
aspx.page	Begin PreLoad	0.000039	0.000005
aspx.page	End PreLoad	0.000044	0.000005
aspx.page	Begin Load	0.000049	0.000005
aspx.page	End Load	0.000056	0.000007
aspx.page	Begin LoadComplete	0.000061	0.000005
aspx.page	End LoadComplete	0.000066	0.000005
aspx.page	Begin PreRender	0.000071	0.000005
aspx.page	End PreRender	0.000077	0.000005
aspx.page	Begin PreRenderComplete	0.000082	0.000006
aspx.page	End PreRenderComplete	0.000088	0.000005
aspx.page	Begin SaveState	0.000105	0.000018
aspx.page	End SaveState	0.000111	0.000005
aspx.page	Begin SaveStateComplete	0.000116	0.000005
aspx.page	End SaveStateComplete	0.000122	0.000007
aspx.page	Begin Render	0.000127	0.000005
aspx.page	End Render	0.000145	0.000018

# Challenge #1: Fix the application

- 1) Use **Systems Manager Session Manager** to log in and find the issue
- 2) Use **Systems Manager Run Command** to fix the issue

# Challenge #2: Automate inventory and patching

- 1) Use **Systems Manager Inventory** to configure inventory
- 2) Use **Systems Manager Patch Manager** to configure patching

# Challenge #3: Automate domain join

1) Use **Systems Manager State Manager** to configure domain join

# Challenge #4: Create a custom image

- 1) Create an AMI from one of the instances and put the ID of the new AMI in **Systems Manager Parameter Store**
- 2) Use **Systems Manager Automation** to create a new AMI every Saturday with the latest patches installed



# Workshop

# Wrap-up

# Thank you!



Please complete the  
session survey in the  
mobile app.