



SYSTEM CENTER ORCHESTRATOR 2012 R2 İLE ŞİRKET YÖNETİMİNİN OTOMATİKLEŞTİRİLME SÜRECİ

Önlisans Bitirme Projesi Sunumu

İSTANBUL,2015

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6. RUNBOOK ÇALIŞMALARI
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1. SYSTEM CENTER ORCHESTRATOR 2012 R2 GENEL BAKIŞ

System Center Orchestrator Nedir?



Gelişen Teknolojiye ayak uyduracak şekilde oluşturulmuş olan System Center, Microsoft'un istemciler, sunucular, mobil aygıtlar ve veri merkezleri gibi bir organizasyonda bulunan tüm IT mekanizmasının kontrolünü ve konfigürasyonunu tek bir elden yönetmemizi sağlayan ürün ailesidir.

Bu ürün ailesinden biri olan Orchestrator, IT süreçlerinde otomasyonu sağlamak amacıyla kurumsal şirketlerin sistemlerinde kullanılan organizasyon içinde olan olası hataları önlemek, işlemleri hızlandırarak zamandan tasarruf sağlamak amacıyla kullanılmaktadır.

System Center Orchestrator Gelişim Süreci

Past & Present

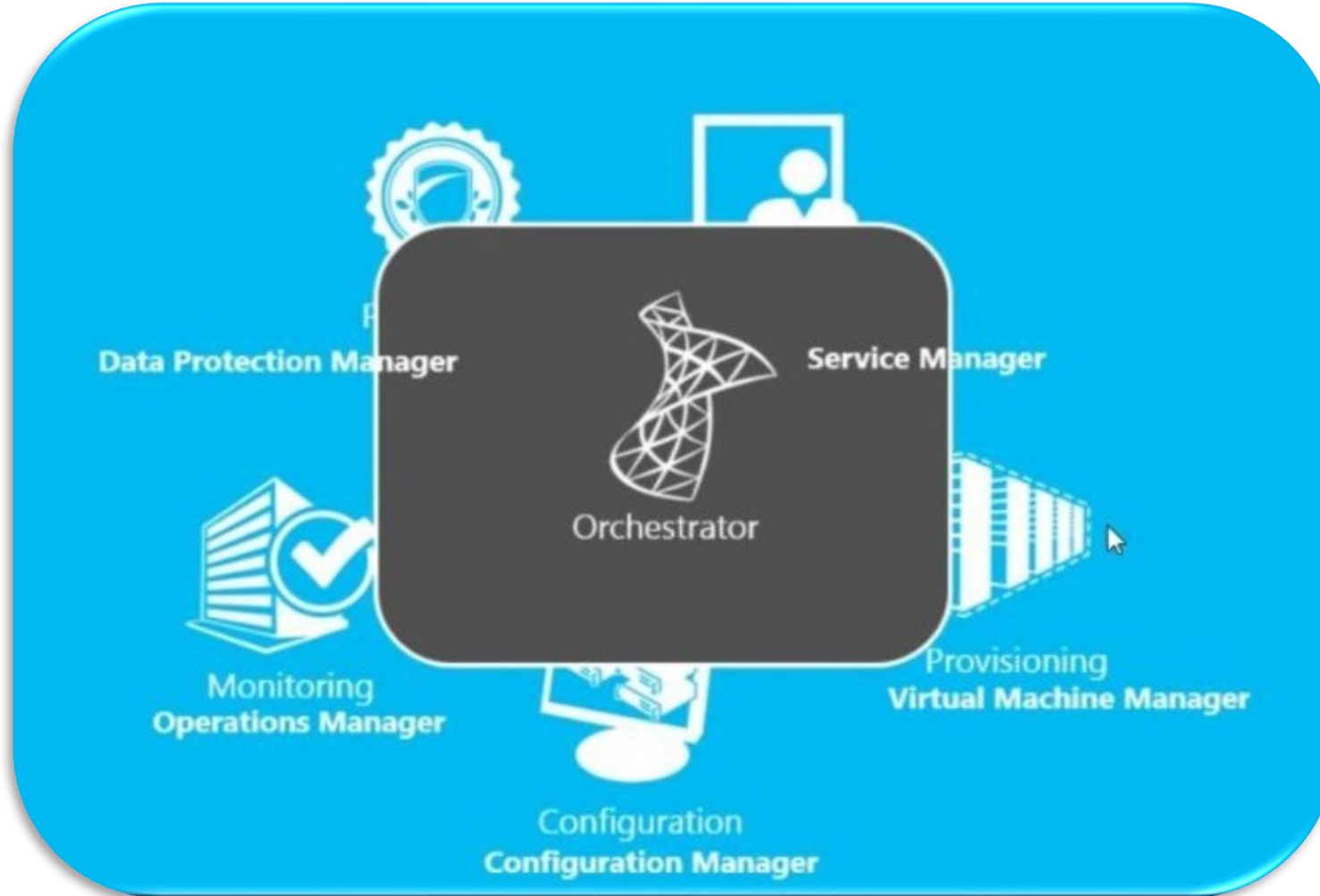


System Center Orchestrator 2012 R2 ile Gelen Yeni Özellikler

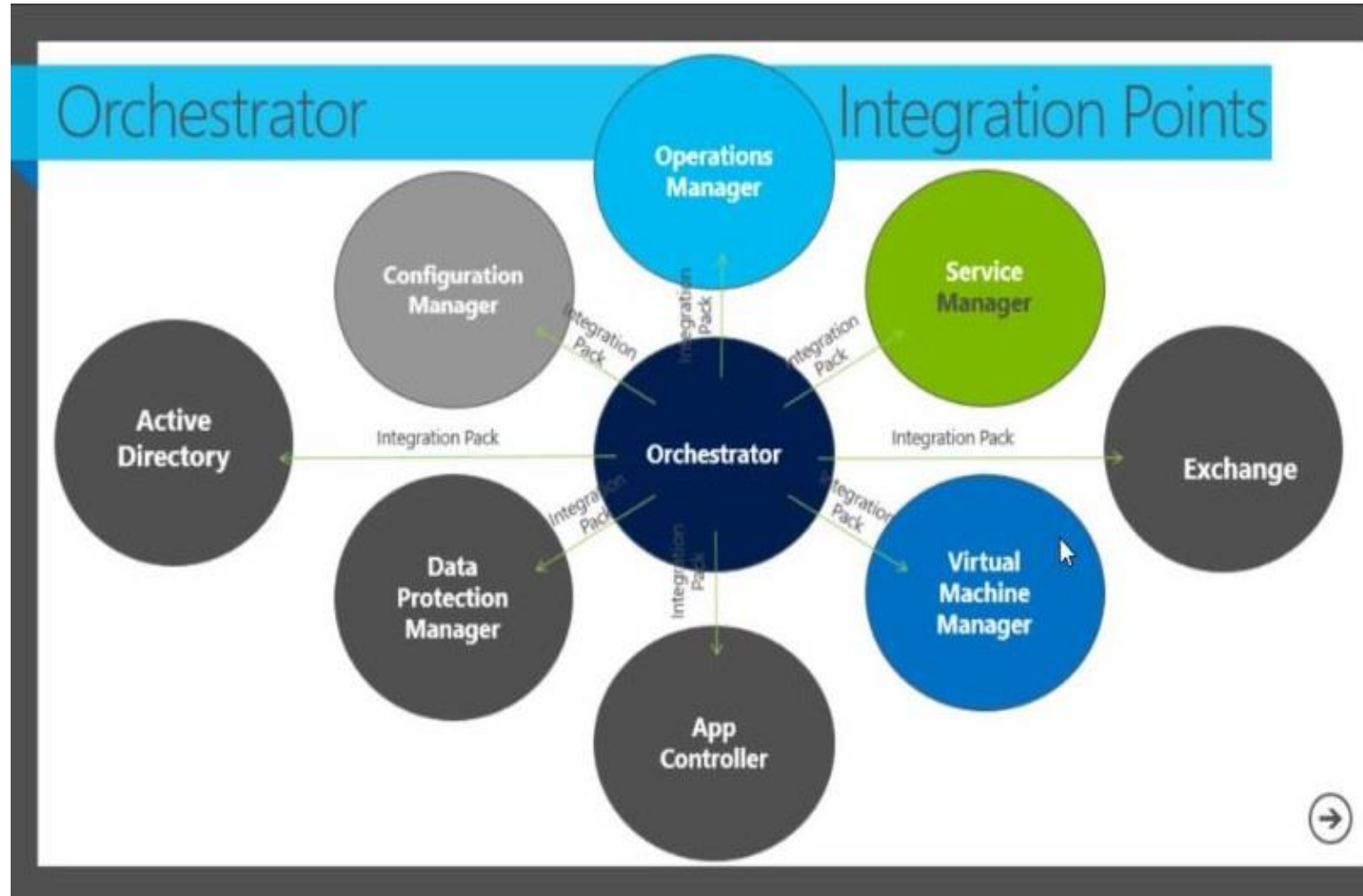
System Center Orchestrator R2

- Windows Server 2012 R2 Support
- Service Management Automation
 - Windows Azure Pack
 - Runbook Workers
- System Center Integration Pack for Microsoft SharePoint

System Center Orchestrator 2012 R2 ile Yapabileceklerimiz



Integration Pack Nedir?



2. MICROSOFT ÖZEL BULUTU

Bulut Nedir ?

Bulut, kısaca entegre çalışan BT altyapıları oluşturmak için hayati önem taşıyan, teknoloji kaynaklar ve altyapının konumu gibi unsurların soyut bir ifadesidir.

Microsoft, Özel ve Genel bulutun birlikte çalışmasını sağlamak amacıyla geliştirilmiş kapsamlı tek bulut servis sağlayıcısıdır. Son derece kolay ve tanıdık olması tercih edilmesinin diğer sebeplerindendir.



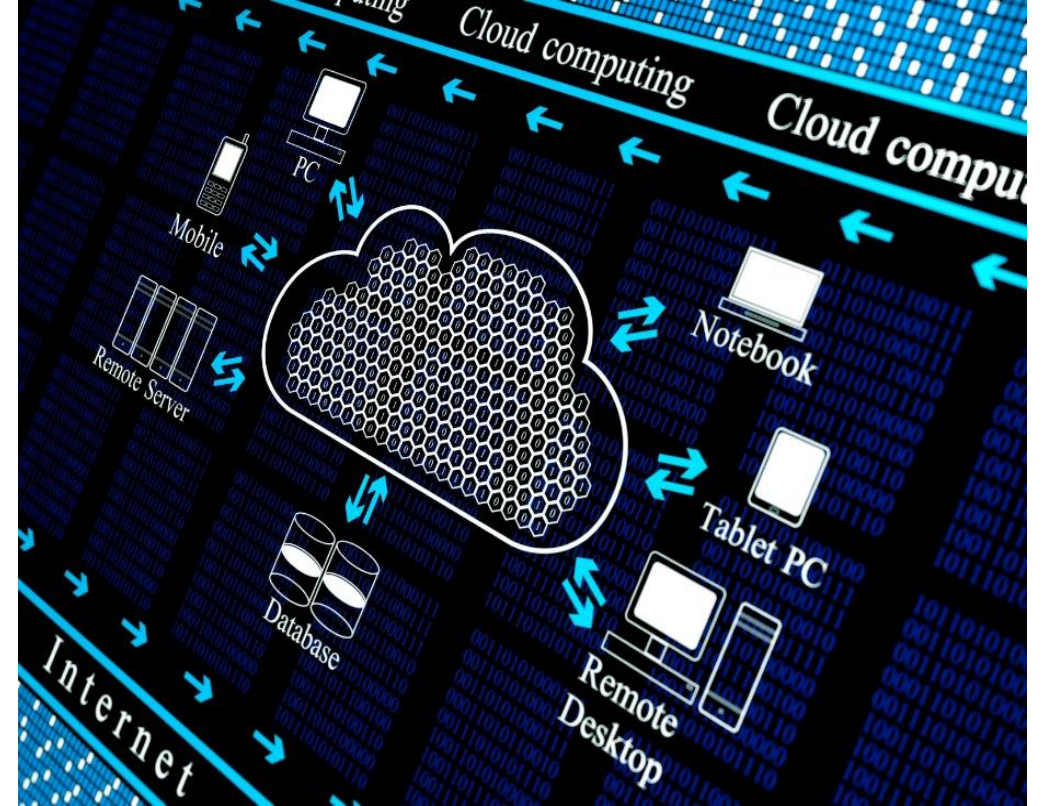


Bulut Bilişim (Cloud Computing) Nedir ?

Bulut mimarisi, internet iletişimi yoluyla kullanılan internete çıkan her aygıt üzerinden herhangi bir yazılım kurulumuna ihtiyacımız olmadan, ortak paylaşım dosyalarına ulaşmamızı sağlayan platformdur.

Bulut Bilişim (Cloud Computing) Özellikleri

- Her şey tarayıcı ile sağlanıyor
- Ölçeklendirilebilir, kuvvetli ve güvenli
- Abone modeli
- İnternete giren her cihazdan ulaşım
- Sürekli gelişim ve kesintisiz güncelleme
- Birden fazla dile çeviri
- 99.9% Çalışma Garanti Anlaşması



Bulut Bilişim Türleri

- Private Cloud (Özel Bulut)
- Public Cloud (Genel Bulut)
- Hybrid Cloud (Karma Bulut)
- Community Cloud (Topluluk Bulutu)

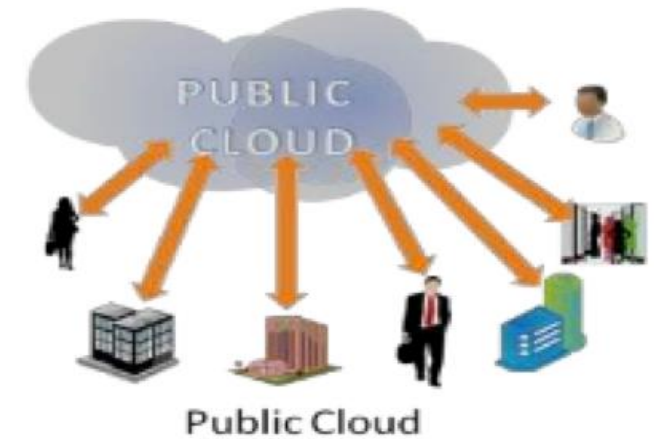
- **Private Cloud (Özel Bulut)**

Daha çok büyük şirketler ve veri güvenliği önemli her boyuttan şirkete hitap eder. Şirket kendi bulutunu kurar. Dışarıya kapalı bulut, şirket içinde ortak kullanılır.

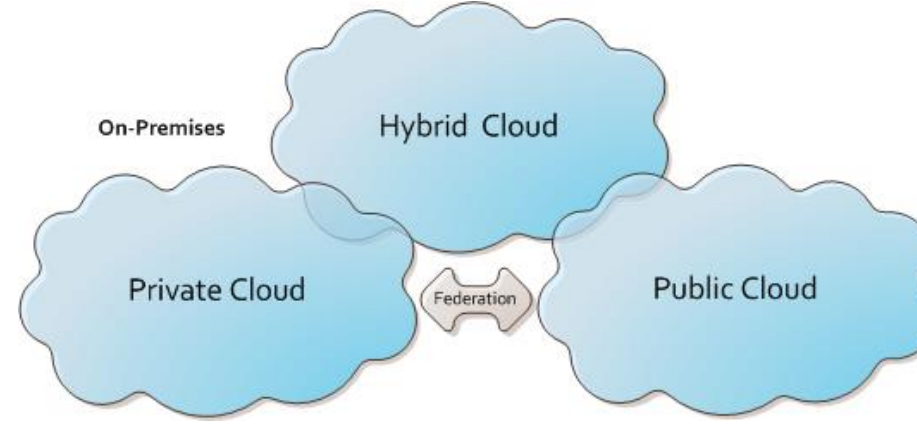


- **Public Cloud (Genel Bulut)**

Genel Bulut, tamamı internet üzerindeki sunucular ile verilen cloud hizmetidir. Genel bulutta kullanılmayan ve/veya şirketimize dair hiçbir altyapı servisi ve hizmeti yoktur. Tüm yapımız tamamen bulut hizmetini aldığımız şirkette barınmaktadır. Maliyet avantajından dolayı küçük ve orta ölçekli şirketlerde kullanabilirsiniz.



- **Hybrid Cloud (Karma Bulut)**



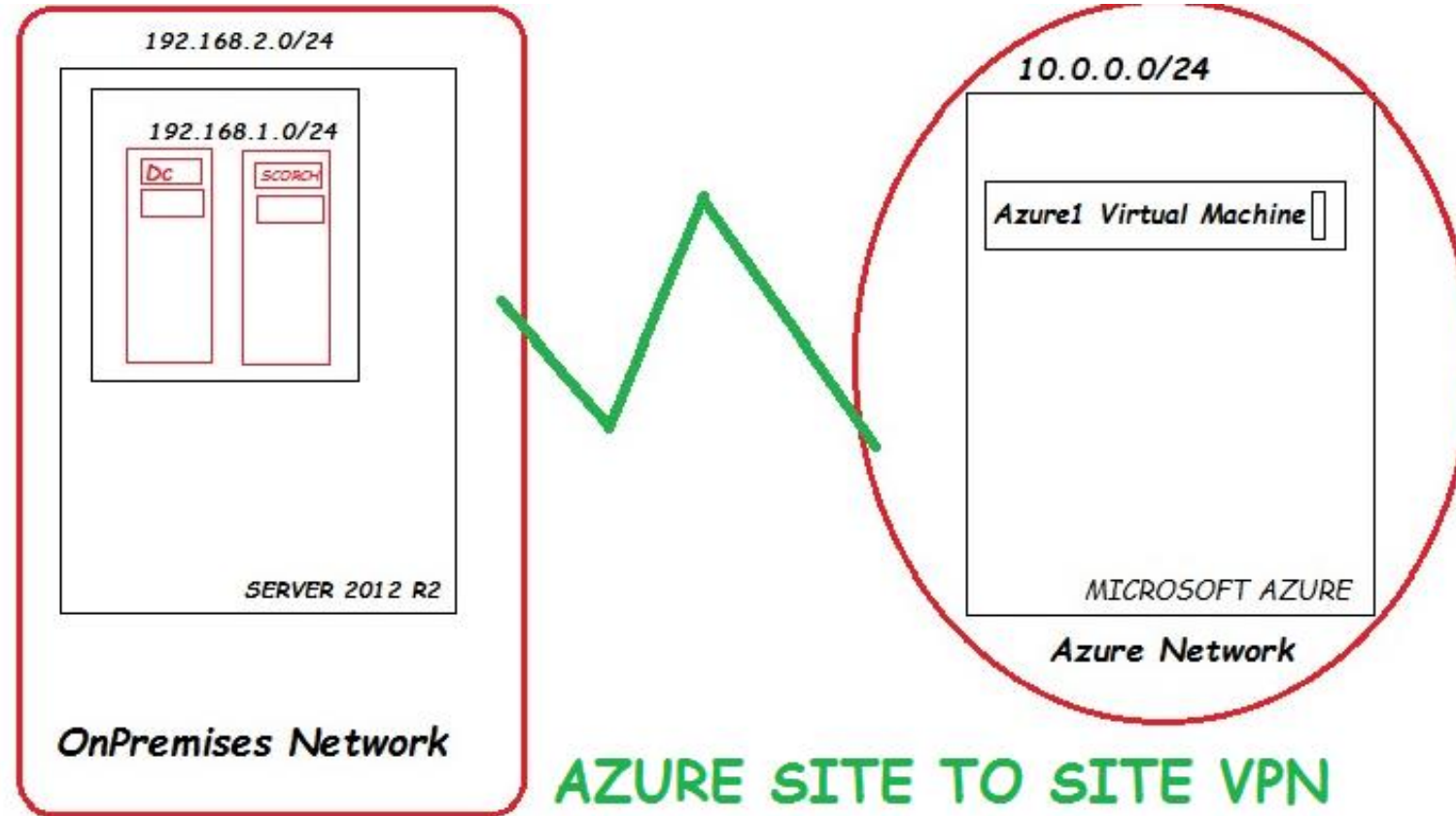
Karma Bulut, Özel bulut ile Genel bulutun birlikte kullanılmasına denir. Gizlilik ya da güvenilirlik derecesinin çok önemli olmadığı bazı uygulamalar için genel bulutun, gizlilik ve güvenliliğin önemli olduğu alanlar özel bulutun kullanıldığı sistemlerdir.

- Community Cloud (Topluluk Bulutu)

Belirli bir toplulukla paylaşılan buluttur. Bulut altyapısı birkaç organizasyon ya da firma tarafından paylaşılır, böylece aynı amacı paylaşan aynı güvenlik gereksinimleri olan organizasyon firmaları desteklemektedir.



System Center Orchestrator 2012 R2 Örnek Bulut Yapısı



3. ORCHESTRATOR KURULUM GEREKSİNİMLERİ

- Sistem Gereksinimleri

System requirements

Supported Operating Systems: Windows Server 2008 R2

- **Recommended Configuration**

- RAM – minimum 1GB recommended 2GB
- Disk space minimum 200MB
- CPU Dual Core or better

The following software is required to install Orchestrator:

- Microsoft SQL Server 2008 R2
- .NET Framework 4 (if you are installing the Orchestration console or web service)
- Microsoft Silverlight 4 (for the Orchestration console only)

Operating System

- Management server, Runbook server, Orchestrator web service: Windows Server 2008 R2
- Runbook Designer, Runbook Tester: Windows Server 2008 R2 or Windows 7

- Yazılımsal Gereksinimler

- Silverlight 5.0
- SQL Server 2008 R2 (64 bit)
- Web Server (IIS)
- .Net Framework 3.5

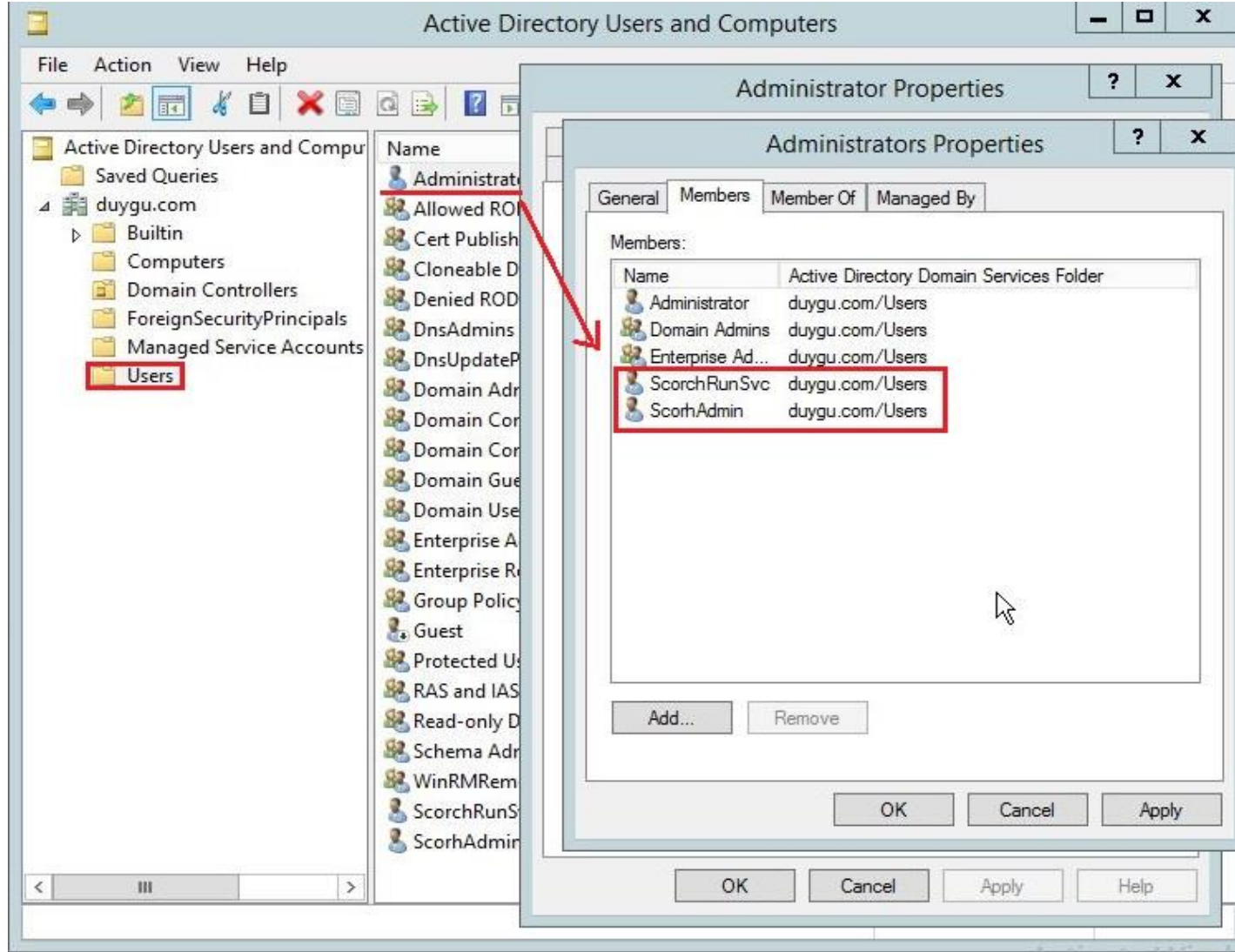
***System Center Orchestrator uygulamasının kurulumunun yapılacağı işletim sistemi diğer System Center ürünlerinde olduğu gibi Active Directory Domain'ine üye edilmiş olmalıdır ve Region Ayarlarından English (United States) seçilmelidir.

4. ORCHESTRATOR KURULUMU

Gereksinimlerin Kurulması

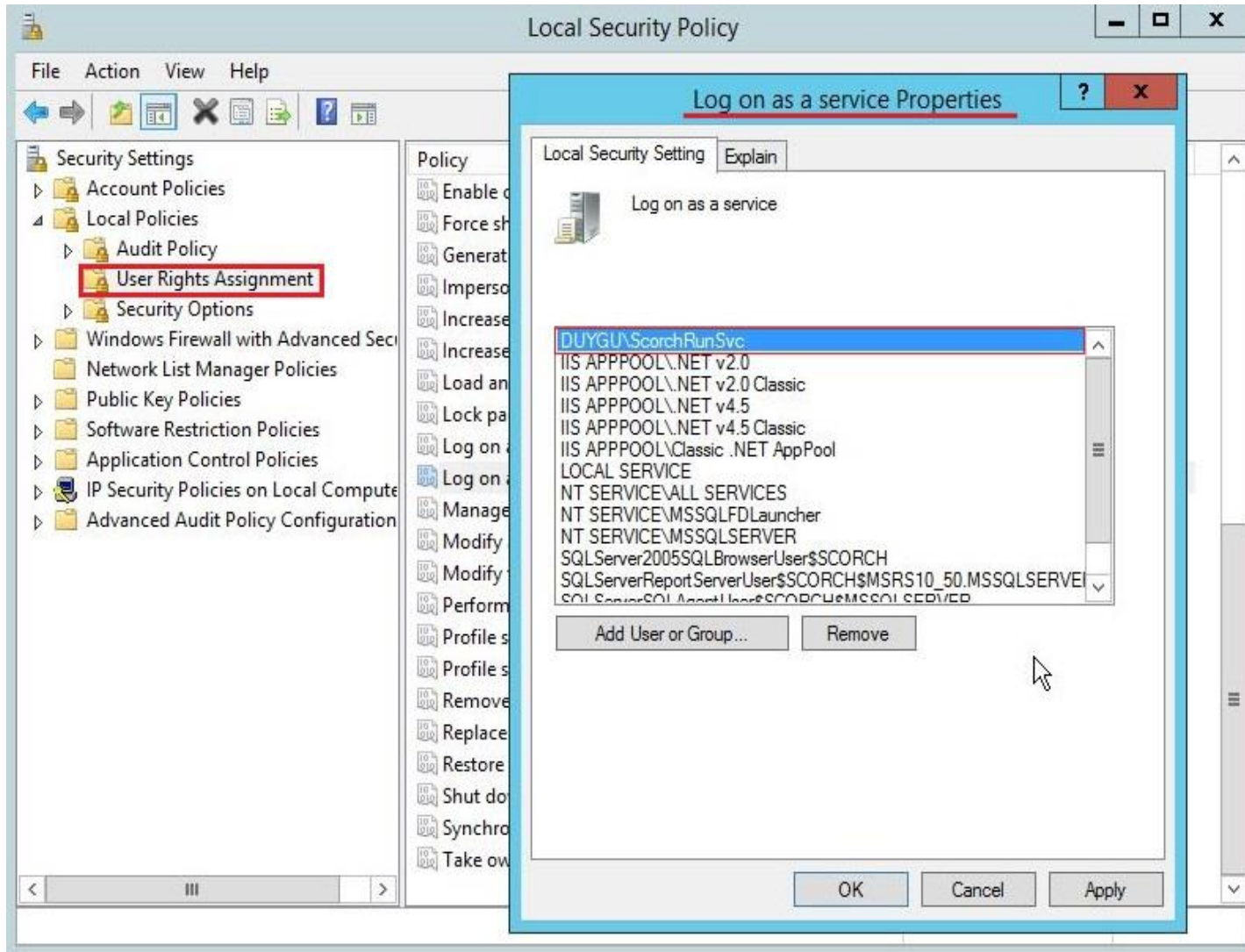
1. Region Ayarları
2. .Net Framework 3.5 Kurulumu
3. Web Server (IIS) Kurulumu
4. Silverlight 5.0 Kurulumu
5. SQL Server 2008 R2 Kurulumu

AD'de Account Ayarları



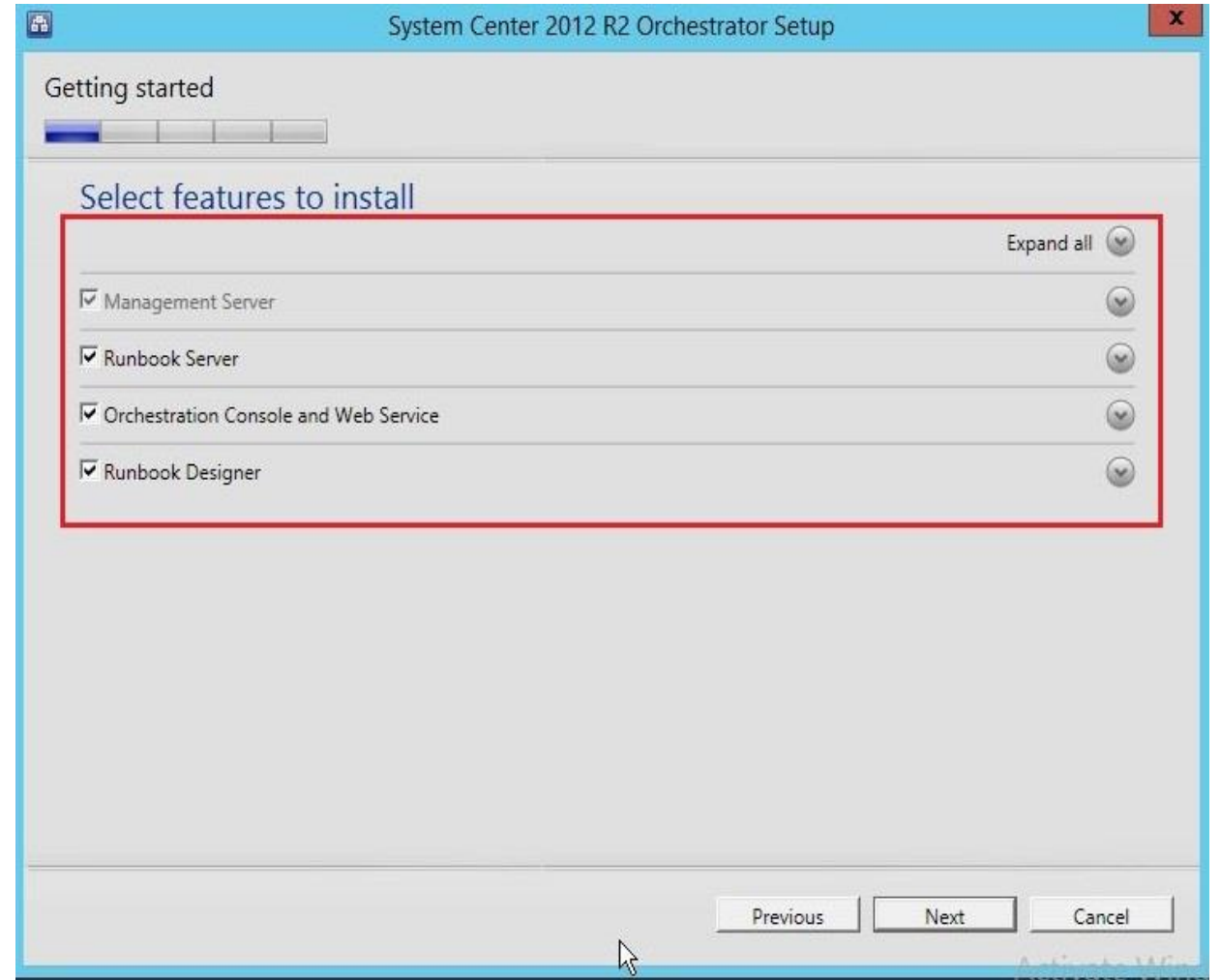
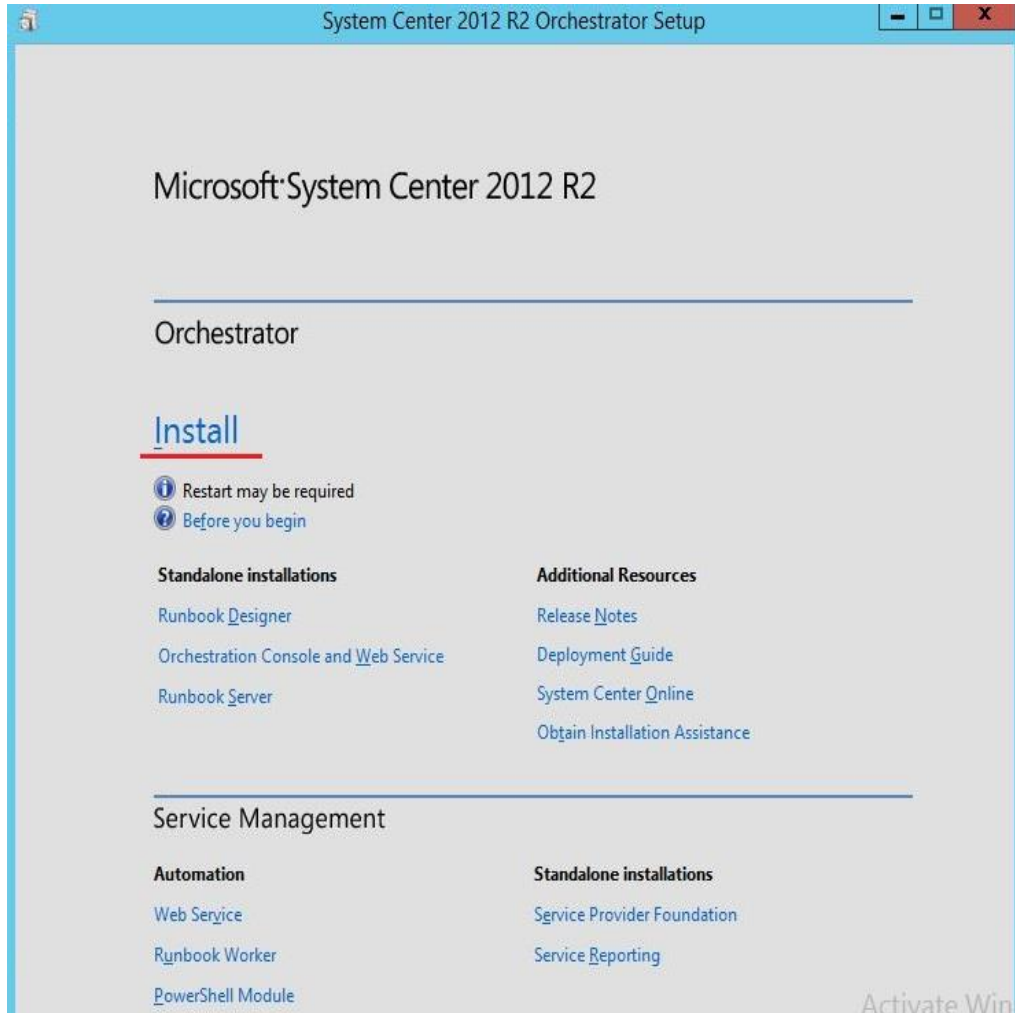
AD üzerinde iki kullanıcı oluşturulur. Bunlar orchestrator servislerini yönetecektir.

Daha sonra Orchestrator sunucusuna bağlanıp, bu 2 kullanıcıyı local administrator grubuna eklenir.



Start / Çalıştır / secpol.msc /
Local Policies / User Rights
Assignment / Log on a service
kısına servisi çalıştıracak user 1
eklenir.

Orchestrator Kurulması



System Center 2012 R2 Orchestrator Setup

Configuration

Configure the service account

Enter the user account to use to run runbooks and access remote system resources. This account must have "Log on as a service" rights enabled. Orchestrator will enable this right if it is not already enabled.

As a security best practice, do not use a domain administrator account. To learn more about security best practices and how this account is configured to access Orchestrator database, see the [Orchestrator deployment guide](#).

Username (you may enter domain\username):
ScorchRunSvc

Password:
••••••••

Domain:
DUYGU

Test

✓ Credentials accepted

Previous Next Cancel

System Center 2012 R2 Orchestrator Setup

Configuration

Configure the database server

Specify the database server, instance name, and port number for the Orchestrator database. You must have sufficient permissions on the database instance. To learn more about the database permissions, see the [Orchestrator deployment guide](#).

Server (you may enter server\instance): SCORCH Port: 1433

Browse...

Authentication Credentials

☒ Windows Authentication
☐ SQL Authentication

Username:

Password:

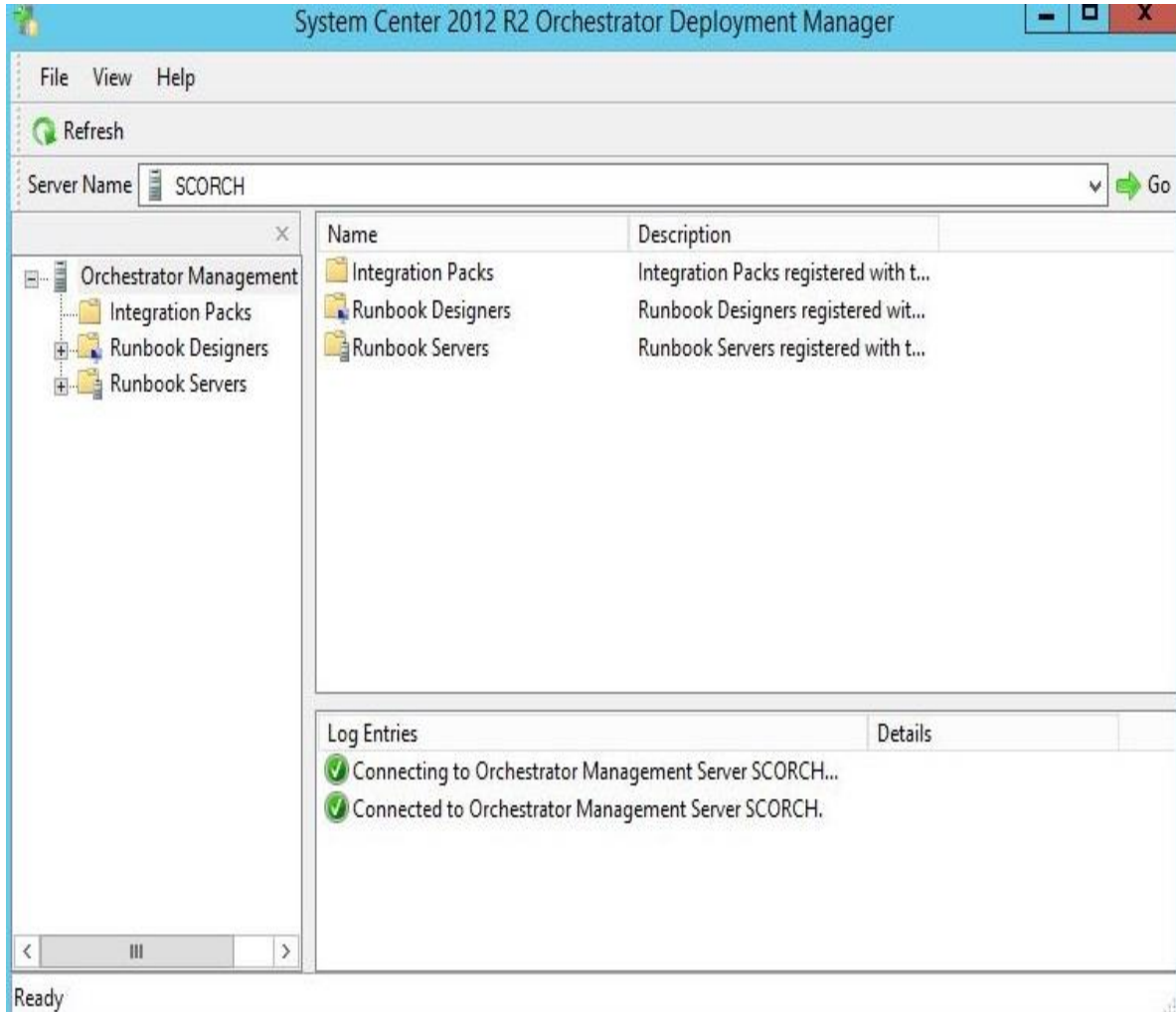
Test Database Connection

✓ Database connection succeeded.

Previous Next Cancel

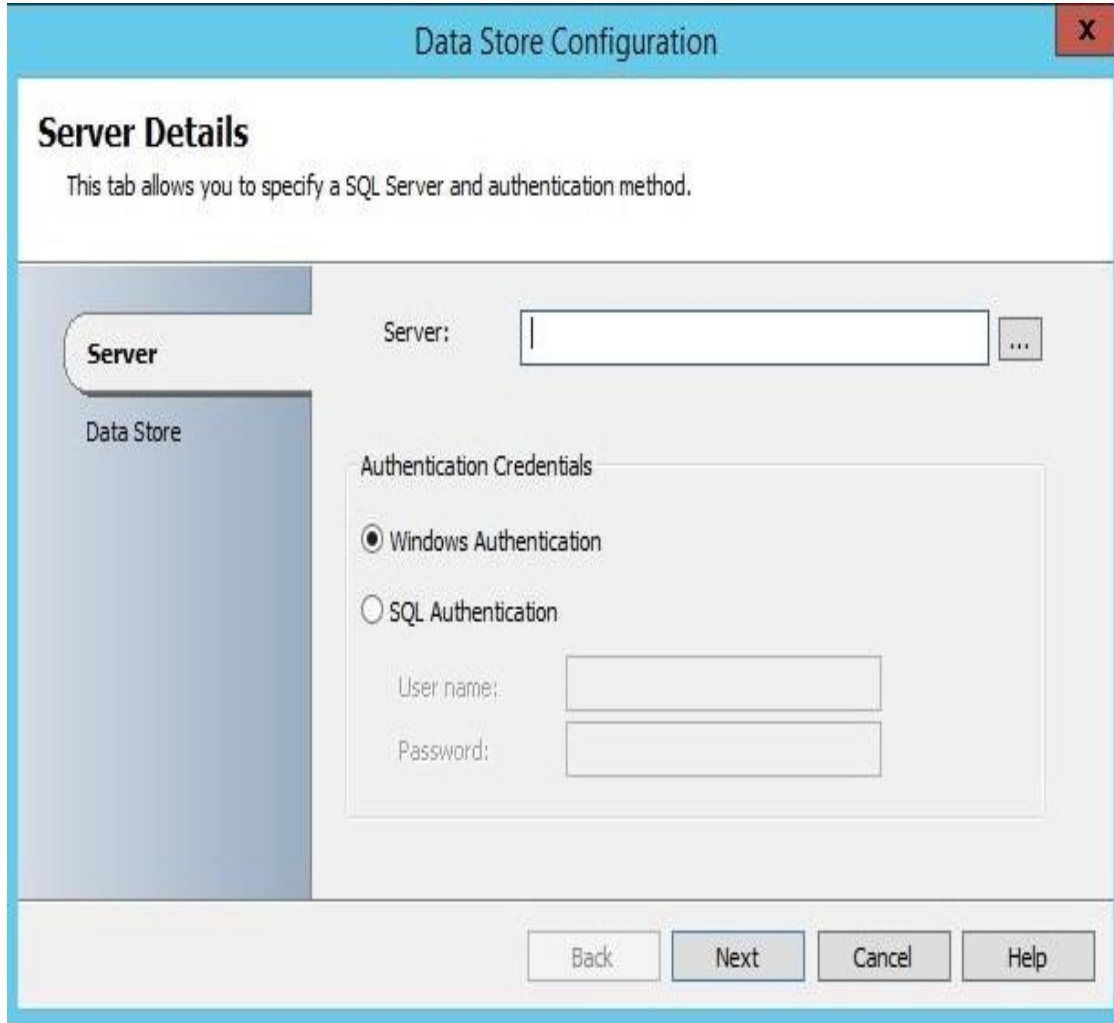
5. ORCHESTRATOR İLE GELEN TOOL'LARIN TANITILMASI

Deployment Manager



Orchestrator içerisinde kullanılmak istenen integration pack leri sisteme dahil etmek için kullanılan ara birimdir.

Datastore Configuration



The image shows a 'Data Store Configuration' dialog box. It has a title bar with the text 'Data Store Configuration' and a close button (X). The main content area is titled 'Server Details' and includes a subtitle: 'This tab allows you to specify a SQL Server and authentication method.' On the left, there is a sidebar with two tabs: 'Server' (selected) and 'Data Store'. The 'Server' tab contains a 'Server:' label followed by a text input field and a browse button (three dots). Below this, there is a section for 'Authentication Credentials' with two radio buttons: 'Windows Authentication' (selected) and 'SQL Authentication'. Under 'SQL Authentication', there are two text input fields labeled 'User name:' and 'Password:'. At the bottom of the dialog, there are four buttons: 'Back', 'Next', 'Cancel', and 'Help'.

Data Store Configuration

Server Details
This tab allows you to specify a SQL Server and authentication method.

Server
Data Store

Server: ...

Authentication Credentials

☒ Windows Authentication

☐ SQL Authentication

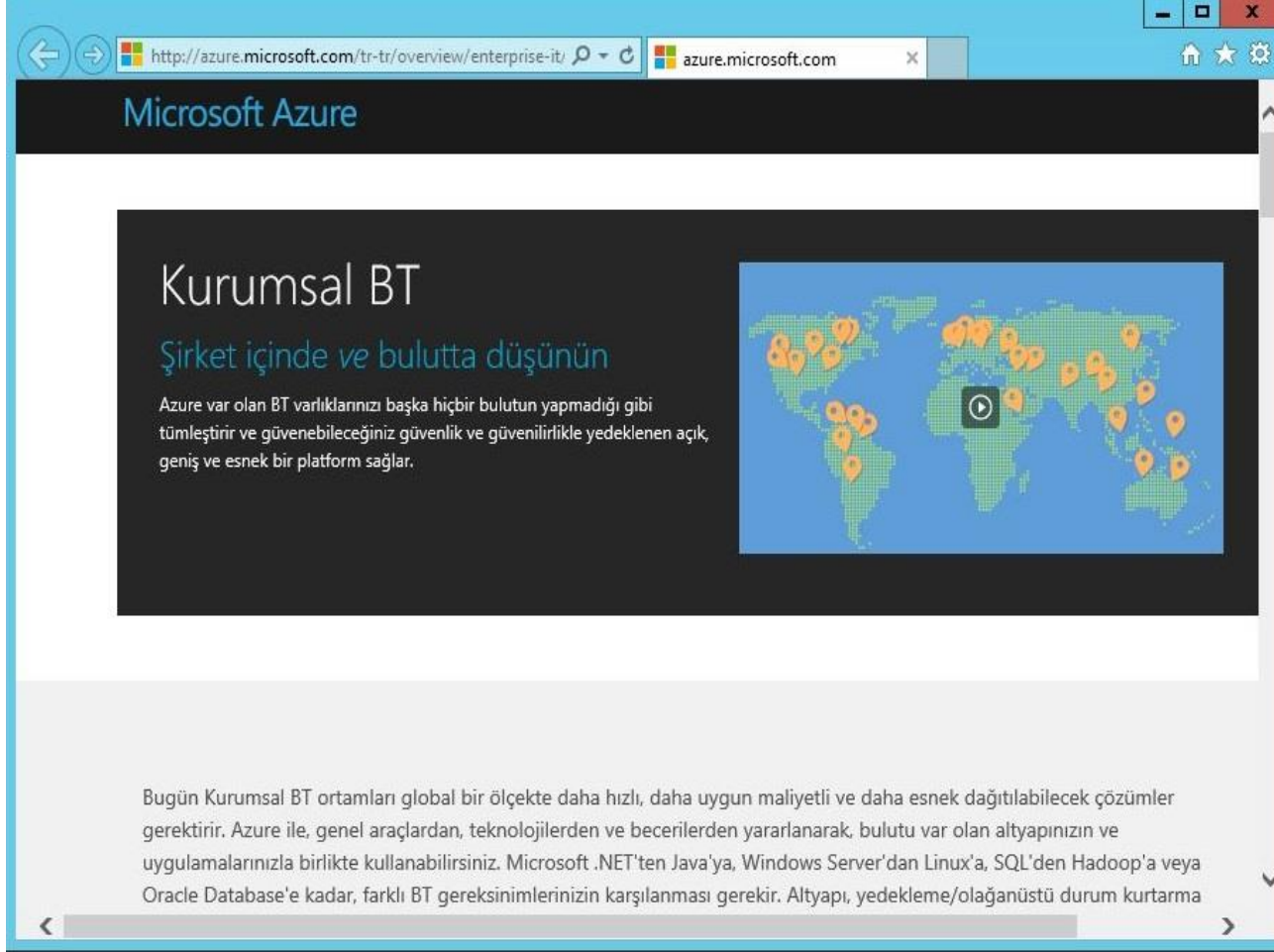
User name:

Password:

Back Next Cancel Help

Veritabanı, içerisinde tüm runbookları, log kayıtlarını ve konfigürasyon bilgilerini barındırmaktadır.

Microsoft Azure Services

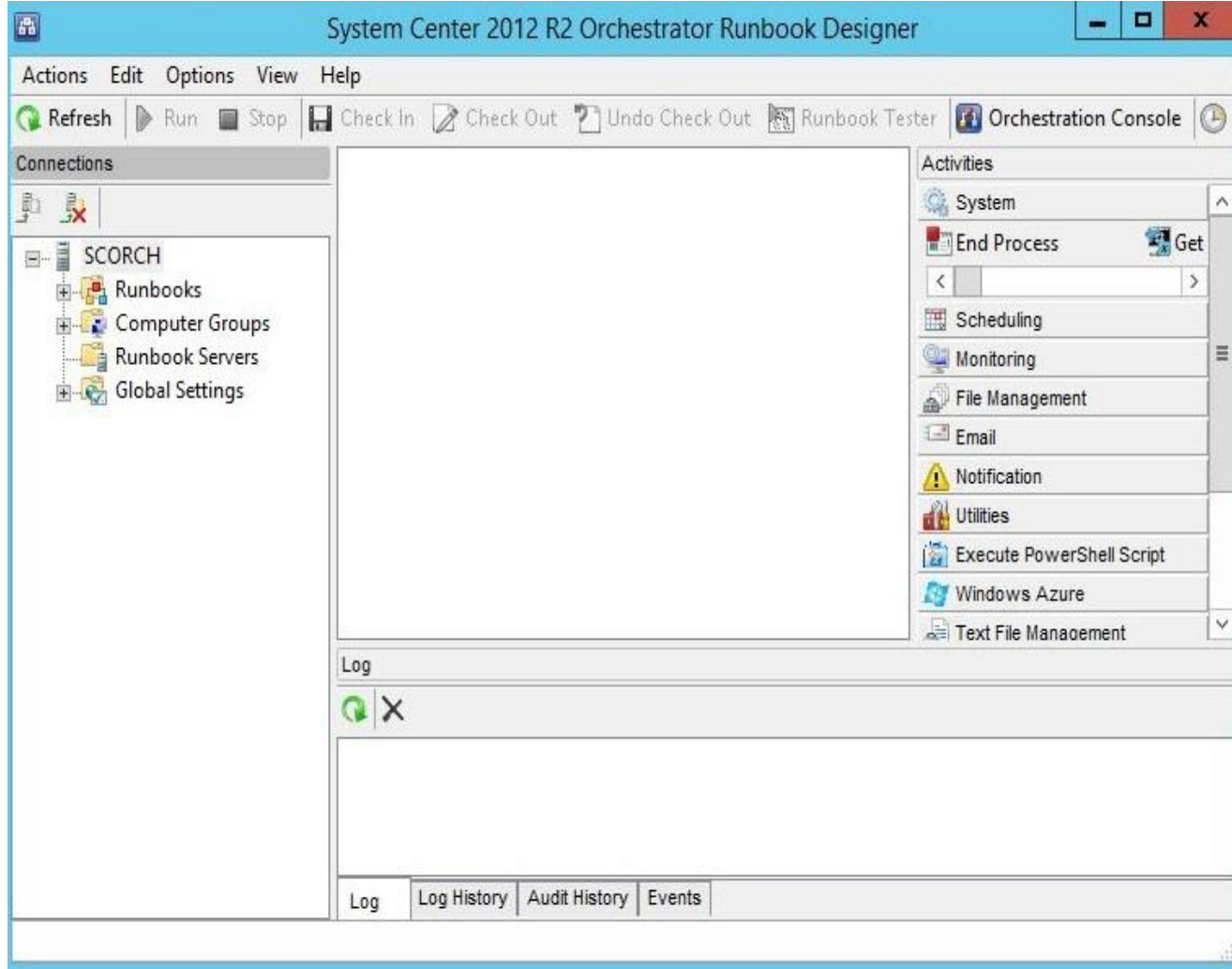


Kullanıcıyı Microsoft Azure Portalına yönlendiren servistir.

Orchestrator Console

Orchestrator veri tabanında bulunan tüm runbook ların görülüp, başlatılıp/durdurulabileceği gerçek zamanlı olarak runbook ların durumlarının görülebileceği ya da yönetilebileceği bir araçtır. Ayrıca bu konsola Web Arayüzünden de ulaşabilirsiniz.

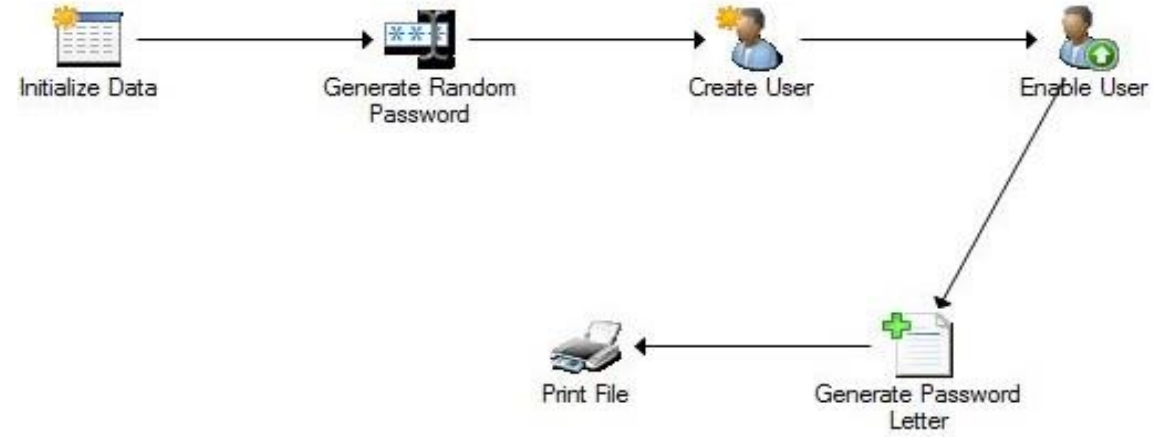
Runbooks Designer



Düşündüğümüz tüm otomasyon işlemlerinin tasarımlarını, testinin yapılmasını ve yönetilmesini sağlayan birimdir.

6. RUNBOOK ÇALIŞMALARI

AD'de Şifre Sahibi Bir Kullanıcı Oluşturma



Initialize Data Properties

Details Information

Define the parameters for the Initialize Data activity.

General

Details

Run Behavior

SAMaccountName (data type: String)

LastName (data type: String)

FirstName (data type: String)

AddRemove

Finish

Cancel

Help

Generate Random Text Properties

Details Information

Generate a string of random text of a specified length

General

Details

Run Behavior

Generate Random Text

Text Length: 7

Text Contents

Enter the minimum length for the following options:

☒ Lower-Case Characters

1

☒ Upper-Case Characters

1

☒ Numbers

1

☐ Symbols

0

Finish

Cancel

Help

Create User Properties

Properties
Define the properties used by the activity.

General

Properties

Run Behavior

Configuration
Name: SCORCH

Properties

Common Name	{FirstName from "Initialize Data"}
First Name	{FirstName from "Initialize Data"}
Last Name	{LastName from "Initialize Data"}
SAM Account Name	{SAMaccountName from "Initialize Data"}
Container Distinguished Name	ou=stajyerler,dc=duygu,dc=com
Password	{Random text from "Generate Random Text"}
User Must Change Password	True

Optional Properties...

Finish Cancel Help

Generate Password Letter Properties

Details information
Define the file and lines to append for the Append Line object.

General

Details

Security

Run Behavior

File

File: \\.\stajyerler\stajyerler.txt

File encoding: Unicode

Append

Text: Dear {FirstName from "Initialize Data"}

Subscribe

Cut

Copy

Paste

Delete

Select All

Expand...

Published Data

Variable

Create Computer

Create Group

Create User

Delete Computer

Delete Group

Delete User

Disable Computer

Exchange Admin

Exchange User

Runbook Control

Finish Cancel Help

Print File Properties

Print File Information
Define the file, printer, and age filter for the Print File activity

General

Details

Security

Run Behavior

Source

File: {File path from "Generate Password Letter"} ...

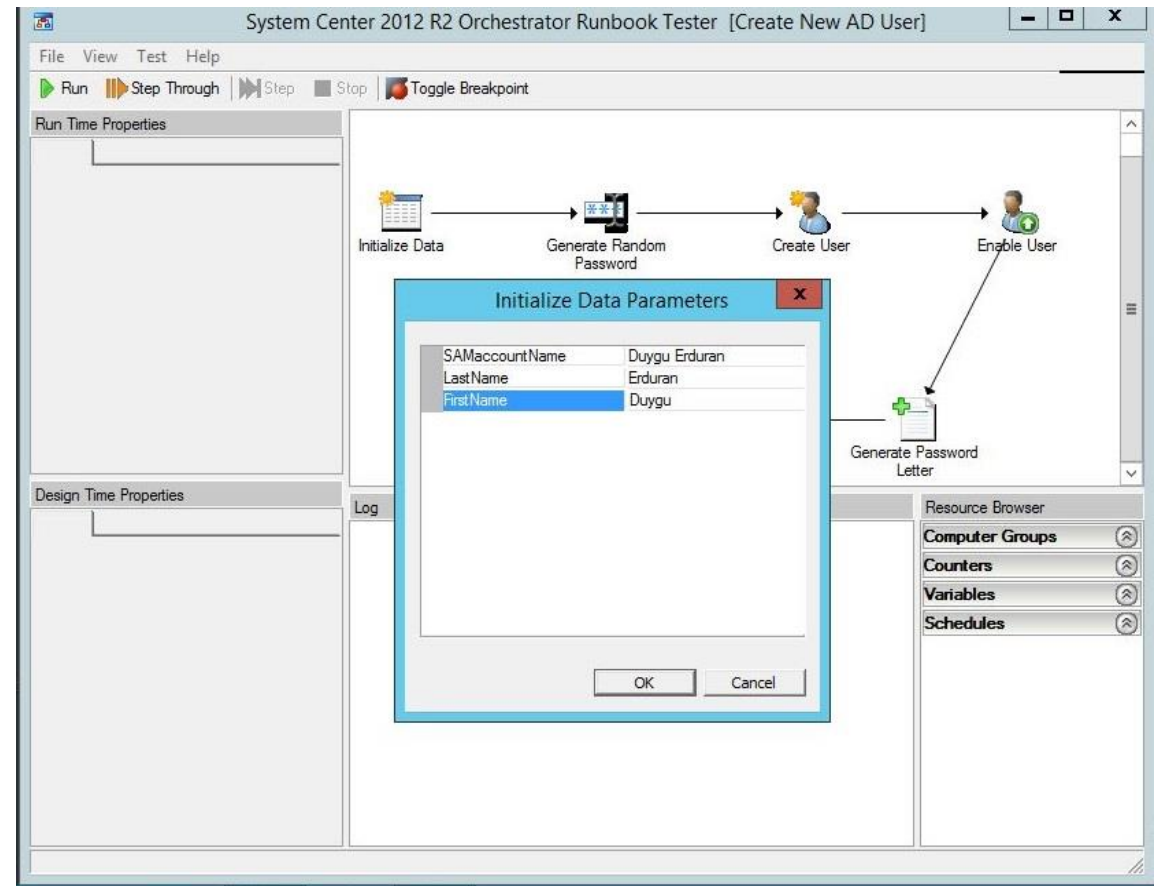
Destination

Printer: Last Printer ...

File filter

Age: (no age filter) 0 days

Finish Cancel Help



System Center 2012 R2 Orchestrator Runbook Tester [Create New AD User]

File View Test Help

Run Step Through Step Stop Toggle Breakpoint

Run Time Properties

```
graph LR; A[Initialize Data] --> B[Generate Random Password]; B --> C[Create User]; C --> D[Enable User]; D --> E[Generate Password Letter]; E --> F[Print File];
```

Design Time Properties

Log (Start Time: 18.5.2015 02:18:11, End Time: 18.5.2015 02:18:26, Status: failed)

Start time	End time	Activity name	
18.5.2015 02:18:12		Initialize Data	Show Details
18.5.2015 02:18:12		Generate Random Password	Show Details
18.5.2015 02:18:13		Create User	Show Details
18.5.2015 02:18:23		Enable User	Show Details
18.5.2015 02:18:24		Generate Password Letter	Show Details

Resource Browser

- Computer Groups
- Counters
- Variables
- Schedules

Activate Windows
Go to System in Control Panel to activate Windows.

stajyerler.txtDuygu.Erduran - Notepad

File Edit Format View Help

Dear DuyguErduran,

This is your new user account in our domain :

First Name :Duygu
Last Name :Erduran
Login Name :Duygu.Erduran
Password :RuHgQo5

King regards,
Your IT Department.

7. MICROSOFT AZURE İLE YEREL IT KAYNAKLARININ BULUTA TAŞINMASI

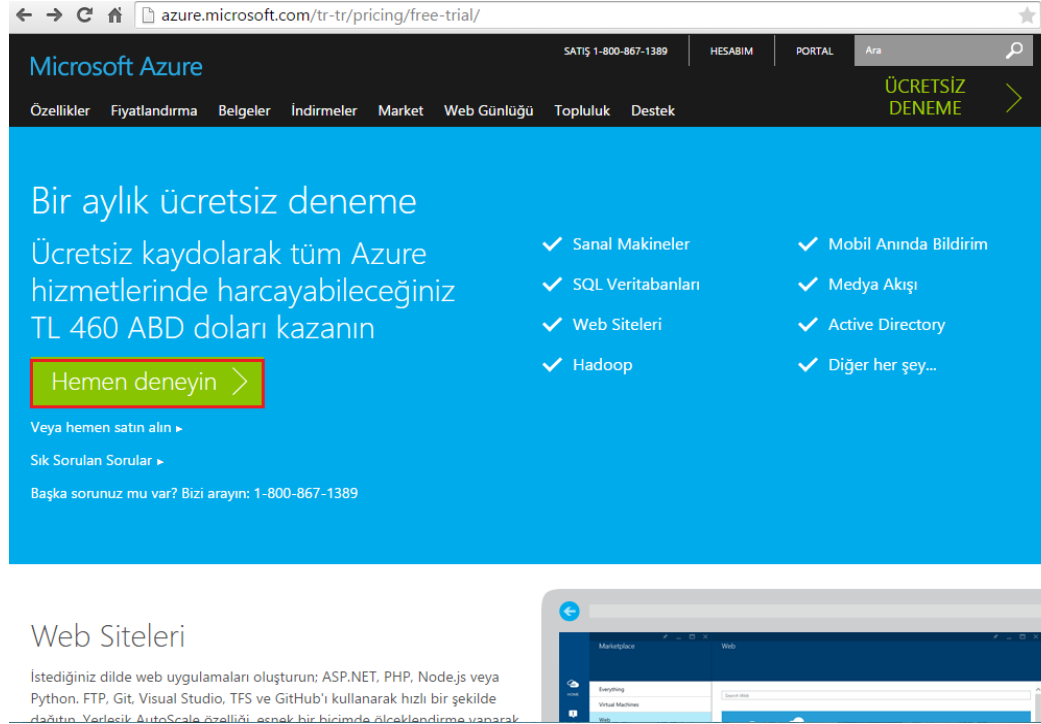


Microsoft Azure Nedir ?

Windows Azure, Microsoft'un bilişim sektörüne sunduğu, bulut bilişim hizmetleri sağlayan Windows Server işletim sisteminin özelleştirilmiş bir ürünüdür. İnternet uygulamaları, veri depolama merkezi, sanallaştırma platformu gibi IT sektörünün kullanabileceği teknolojilerin bulunduğu platformlar Windows Azure yapısında mevcuttur.

Kullanıcılara aynı zamanda test ortamı sağlamasıyla beraber kendi lokasyonlarında kullandıkları uygulamaların Windows Azure üzerine entegrasyonu da mümkündür.

Microsoft Azure ücretli bir bulut servisi olmakla beraber, yeni kayıt olacak kullanıcılara 30 günlük ücretsiz deneme süresi sağlamaktadır. Deneme süresi bittikten sonrada ücretli kullanım fiyatlandırmasına geçmektedir. Hotmail hesabınızla üyelik işlemlerini gerçekleştirebilirsiniz.



The screenshot shows the Microsoft Azure website's pricing page for a free trial. The header includes the Microsoft Azure logo, a phone number (SATIŞ 1-800-867-1389), and navigation links for HESABIM, PORTAL, and a search bar. A prominent yellow banner reads "ÜCRETSİZ DENEME" (Free Trial). The main content area features a blue background with the text "Bir aylık ücretsiz deneme" (One month free trial) and "Ücretsiz kaydolarak tüm Azure hizmetlerinde harcayabileceğiniz TL 460 ABD doları kazanın" (Sign up for free and win TL 460 USD). A green button labeled "Hemen deneyin" (Try now) is highlighted. Below this, there are links for "Veya hemen satın alın" (Or buy now) and "Sık Sorulan Sorular" (Frequently Asked Questions). A list of services available during the trial is shown, including Sanal Makineler, SQL Veritabanları, Web Siteleri, Hadoop, Mobil Anında Bildirim, Medya Akışı, Active Directory, and Diğer her şey... (Everything else...). At the bottom, there is a section for "Web Siteleri" (Web Sites) with a brief description of the services supported.

Microsoft Azure

SATIŞ 1-800-867-1389 HESABIM PORTAL Ara

Özellikler Fiyatlandırma Belgeler İndirmeler Market Web Günlüğü Topluluk Destek

ÜCRETSİZ DENEME

Bir aylık ücretsiz deneme

Ücretsiz kaydolarak tüm Azure hizmetlerinde harcayabileceğiniz TL 460 ABD doları kazanın

Hemen deneyin

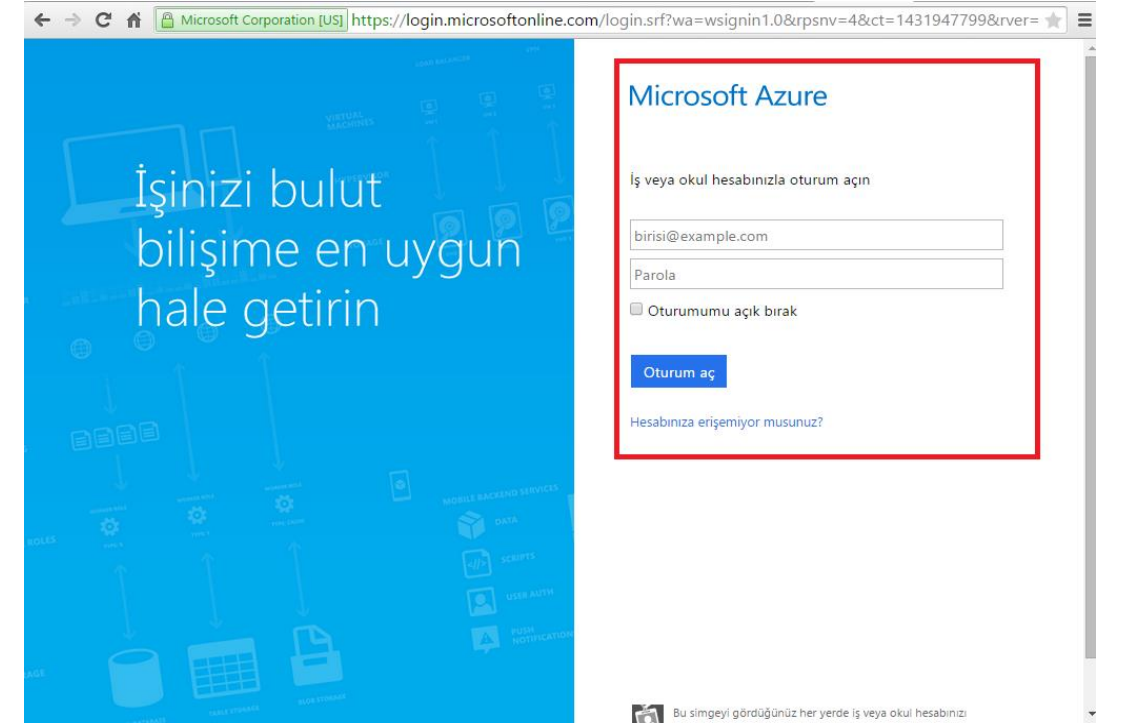
Veya hemen satın alın

Sık Sorulan Sorular

Başka sorunuz mu var? Bizi arayın: 1-800-867-1389

Web Siteleri

İstedığınız dilde web uygulamaları oluşturun: ASP.NET, PHP, Node.js veya Python. FTP, Git, Visual Studio, TFS ve GitHub'ı kullanarak hızlı bir şekilde dağıtın. Yerleşik AutoScale özelliği, esnek bir biçimde ölçeklendirme yaparak



The screenshot shows the Microsoft Azure login page. The header includes the Microsoft Corporation logo and the URL https://login.microsoftonline.com/login.srf?wa=wsignin1.0&rpsnv=4&ct=1431947799&rver=. The main content area features a blue background with the text "İşinizi bulut bilişime en uygun hale getirin" (Get your business the most suitable for cloud computing). A red box highlights the login form, which includes the text "İş veya okul hesabınızla oturum açın" (Sign in with your work or school account), a text input field for the email address (birisi@example.com), a text input field for the password (Parola), and a checkbox for "Oturumumu açık bırak" (Keep me signed in). A blue button labeled "Oturum aç" (Sign in) is also present. Below the login form, there is a link for "Hesabınıza erişemiyor musunuz?" (Can't access your account?). At the bottom, there is a small icon and the text "Bu simgeyi gördüğünüz her yerde İş veya okul hesabınızı" (Everywhere you see this icon, use your work or school account).

Microsoft Azure

İş veya okul hesabınızla oturum açın

birisi@example.com

Parola

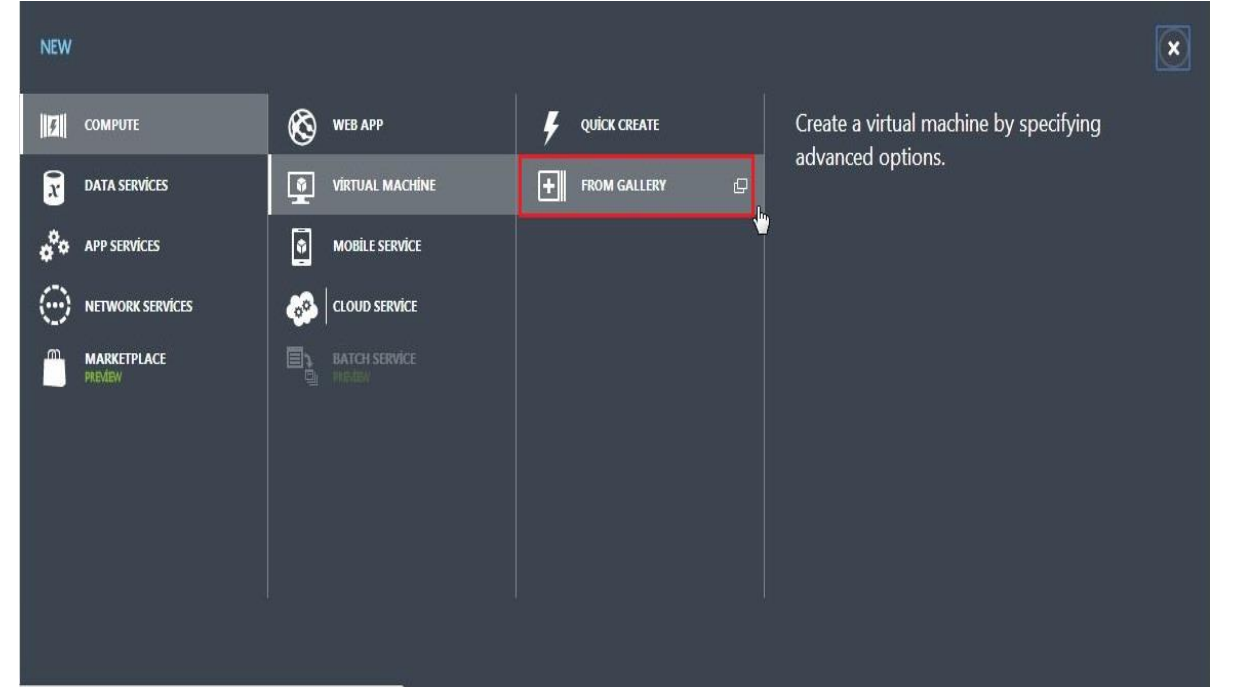
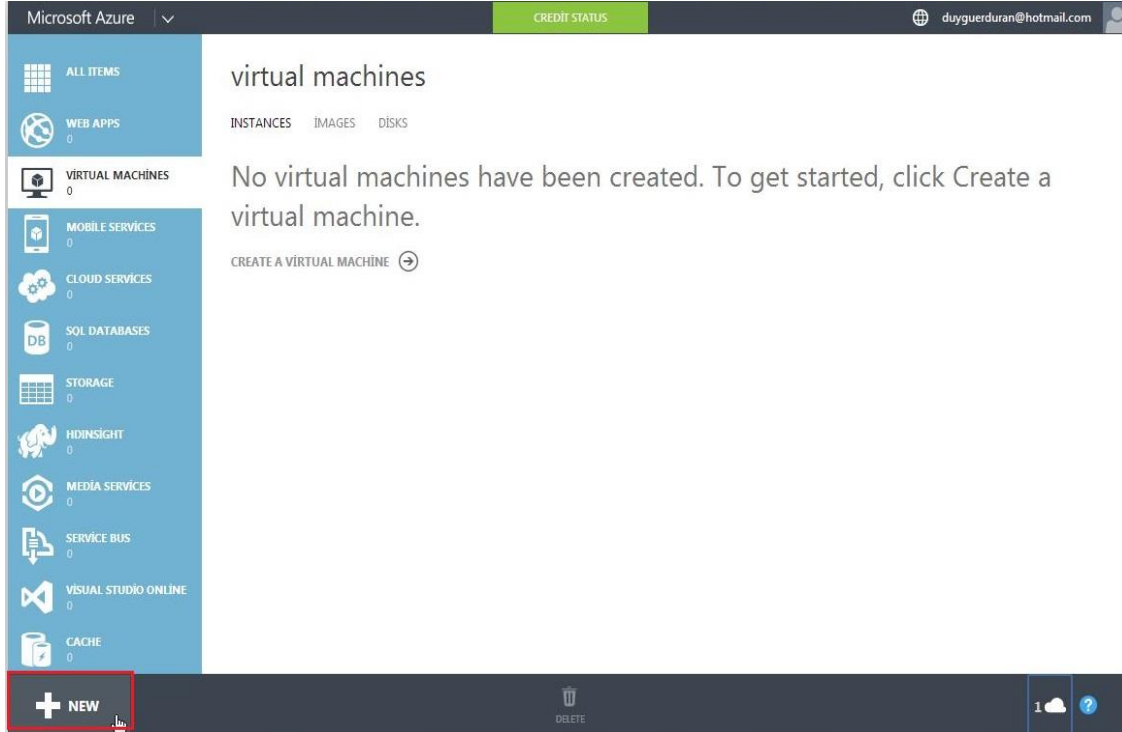
☐ Oturumumu açık bırak

Oturum aç

Hesabınıza erişemiyor musunuz?

Bu simgeyi gördüğünüz her yerde İş veya okul hesabınızı

Azure'da Sanal Makine Oluřturma



CREATE A VIRTUAL MACHINE

Choose an Image

ALL

MICROSOFT

WINDOWS SERVER

SHAREPOINT

SQL SERVER

BIZTALK SERVER

VISUAL STUDIO

DYNAMICS

UBUNTU

COREOS

CENTOS-BASED

SUSE

ORACLE


PUPPET LABS

MY IMAGES


MY DISKS

☐ MSDN

FEATURED




Windows Server 2012 R2 Datacenter




Windows Server Essentials Experience


Windows Server 2012 R2



Windows Server 2012 Datacenter




Windows Server 2008 R2 SP1




Windows Server Remote Desktop Session Host


Windows Server 2012 R2



Windows Server Technical Preview



SharePoint Server 2013 Trial



At the heart of the Microsoft Cloud OS vision, Windows Server 2012 R2 brings Microsoft's experience delivering global-scale cloud services into your infrastructure. It offers enterprise-class performance, flexibility for your applications and excellent economics for your datacenter and hybrid cloud environment. This image includes Windows Server 2012 R2 Update.

OS FAMILY	Windows
PUBLISHER	Microsoft Windows Server Group
NUMBER OF DISKS	1
LOCATIONS	East Asia;Southeast Asia;Australia East;Australia Southeast;North Europe;West Europe;Japan West;Central US;East US;East US 2;South Central US;West US

PRICING INFORMATION

Pricing varies based on the subscription you select to provision your virtual machine.

1

2

3

4

Next

CREATE A VIRTUAL MACHINE

Virtual machine configuration

VERSION RELEASE DATE

4/17/2015

VIRTUAL MACHINE NAME

azure1

TIER

BASIC

STANDARD

SIZE


D1 (1 core, 3.5 GB memory)

NEW USER NAME

duygu

NEW PASSWORD

CONFIRM



Windows Server 2012 R2 Datacenter

At the heart of the Microsoft Cloud OS vision, Windows Server 2012 R2 brings Microsoft's experience delivering global-scale cloud services into your infrastructure. It offers enterprise-class performance, flexibility for your applications and excellent economics for your datacenter and hybrid cloud environment. This image includes Windows Server 2012 R2 Update.

OS FAMILY	Windows
PUBLISHER	Microsoft Windows Server Group
NUMBER OF DISKS	1
LOCATIONS	

PRICING INFORMATION

Pricing varies based on the subscription you select to provision your virtual machine.

1

2

3

4

←

→

CREATE A VIRTUAL MACHINE

Virtual machine configuration

CLOUD SERVICE ?

Create a new cloud service

CLOUD SERVICE DNS NAME

duygu-deneme

.cloudapp.net

REGION/AFFINITY GROUP/VIRTUAL NETWORK ?

Central US

STORAGE ACCOUNT

Use an automatically generated storage account

AVAILABILITY SET ?

(None)

ENDPOINTS ?

NAME	PROTOCOL	PUBLIC PORT	PRIVATE PORT
Remote Desktop	TCP	AUTO	3389
PowerShell	TCP	5986	5986
ENTER OR SELECT A VALUE			

Windows Server 2012 R2 Datacenter

At the heart of the Microsoft Cloud OS vision, Windows Server 2012 R2 brings Microsoft's experience delivering global-scale cloud services into your infrastructure. It offers enterprise-class performance, flexibility for your applications and excellent economics for your datacenter and hybrid cloud environment. This image includes Windows Server 2012 R2 Update.

OS FAMILY

Windows

PUBLISHER

Microsoft Windows Server Group

NUMBER OF DISKS

1

LOCATIONS

PRICING INFORMATION

Pricing varies based on the subscription you select to provision your virtual machine.

Microsoft Azure

CREDIT STATUS

duygurduran@hotmail.com

ALL ITEMS

virtual machines

INSTANCES IMAGES DISKS

NAME	STATUS	SUBSCRIPTION	LOCATION	DNS NAME
azure1	Running	Ücretsiz Deneme	Central US	duygu-deneme.cloudapp.net

azure1 - duygu-deneme.cloudapp.net:49761 - Uzak Masaüstü

Server Manager

Server Manager Dashboard

WELCOME TO SERVER MANAGER

Dashboard

Local Server

All Servers

File and Storage Services

1

Configure this local server

2

Add roles and features

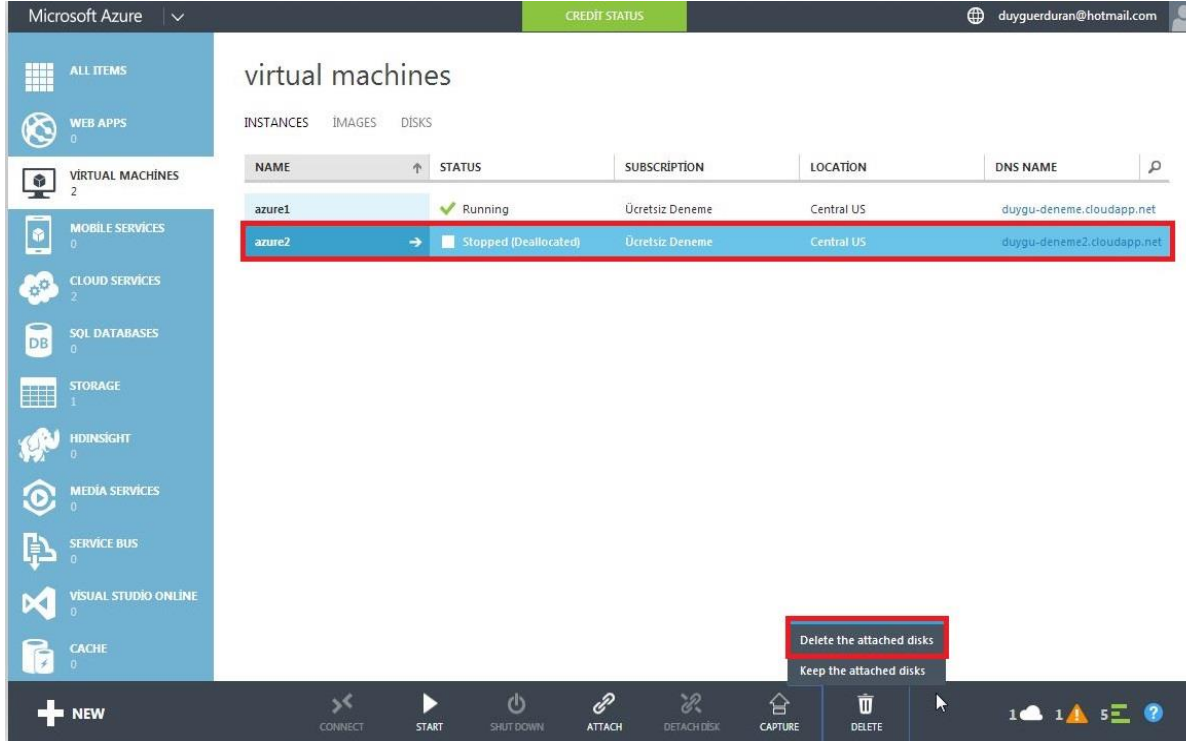
3

Add other servers to manage

4

Create a server group

Azure'da Sanal Makine Silme



Microsoft Azure

CREDIT STATUS

duyguerduran@hotmail.com

virtual machines

INSTANCES IMAGES DISKS

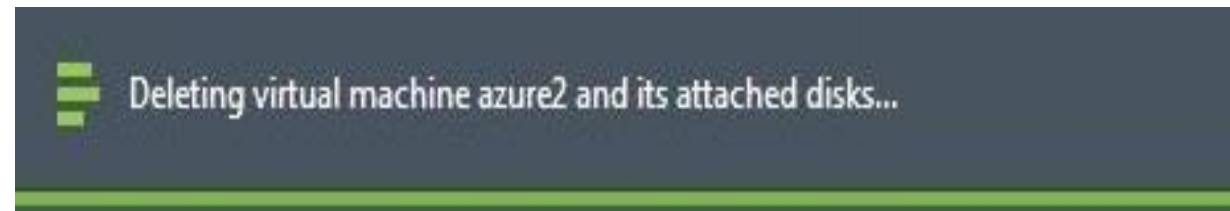
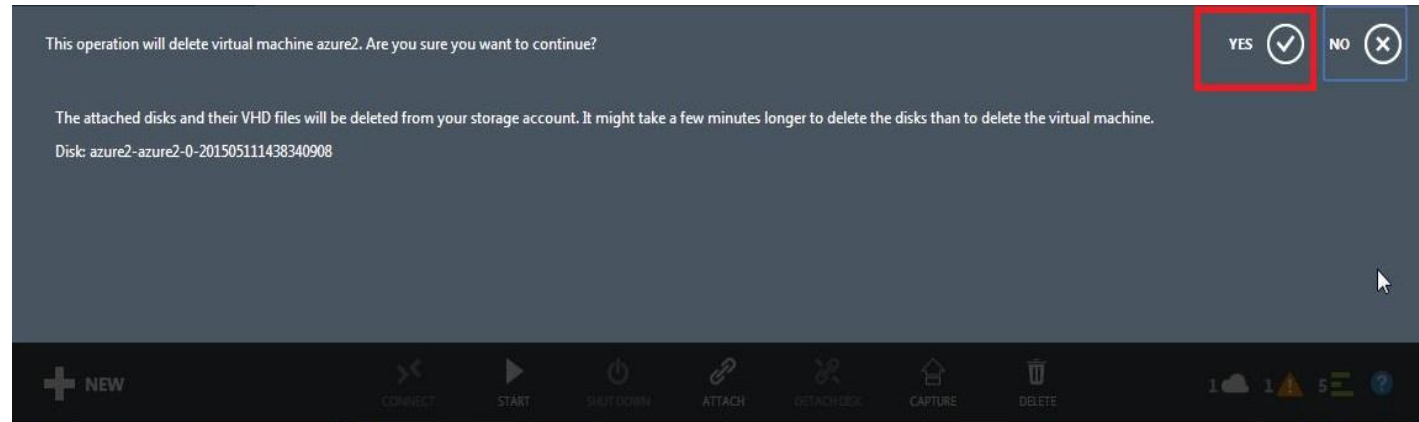
NAME	STATUS	SUBSCRIPTION	LOCATION	DNS NAME
azure1	Running	Ücretsiz Deneme	Central US	duygu-deneme.cloudapp.net
azure2	Stopped (Deallocated)	Ücretsiz Deneme	Central US	duygu-deneme2.cloudapp.net

DELETE

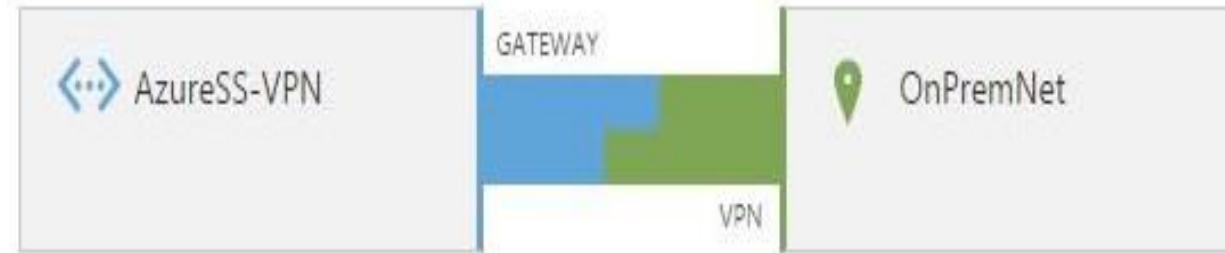
Delete the attached disks

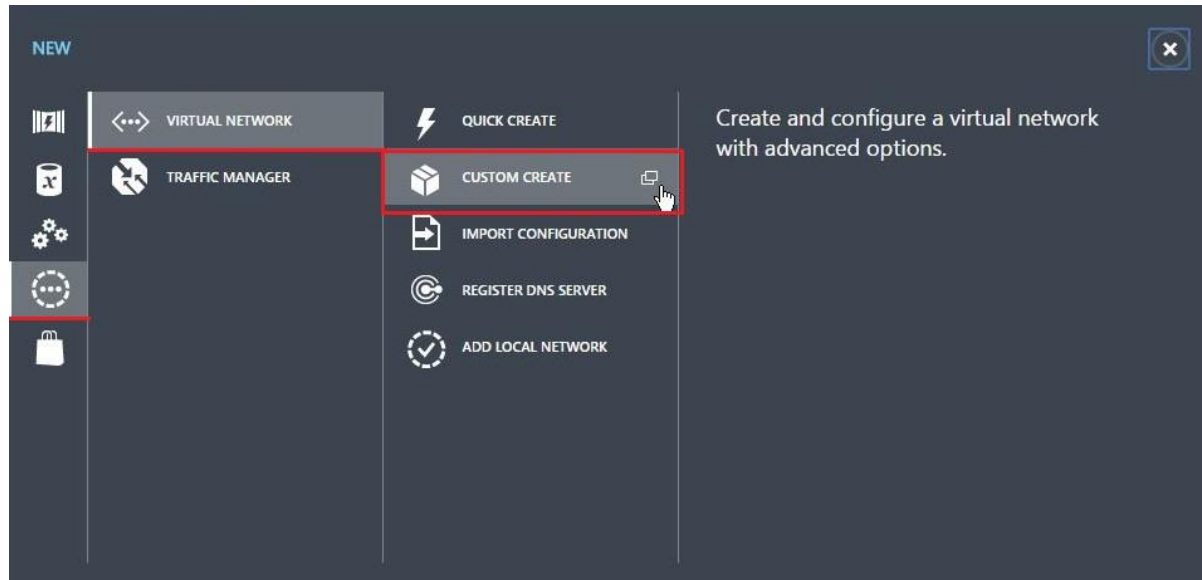
Keep the attached disks

Keep the attached disks seçeneği ile sanal makine silinir ancak bu sanal makineye bağlı diskler korunurlar. Delete the attached disks ile bu sanal makineye bağlı olan disklerde sanal makineyle birlikte silinir.



Azure Site To Site VPN ile OnPremises Yapımızın Haberleşmesi





CREATE A VIRTUAL NETWORK

Virtual Network Details

NAME: AzureSS-VPN

LOCATION: West US

NETWORK PREVIEW

AzureSS-VPN

2 3

CREATE A VIRTUAL NETWORK

DNS Servers and VPN Connectivity

DNS SERVERS ?

SELECT OR ENTER NAME IP ADDRESS

POINT-TO-SITE CONNECTIVITY ?

☐ Configure a point-to-site VPN

SITE-TO-SITE CONNECTIVITY ?

☒ Configure a site-to-site VPN

☐ Use ExpressRoute

NETWORK PREVIEW



CREATE A VIRTUAL NETWORK

Site-to-Site Connectivity

NAME

OnPremNet

VPN DEVICE IP ADDRESS

85.97.97.149

ADDRESS SPACE

ADDRESS SPACE

192.168.2.0/24

STARTING IP

192.168.2.0

CIDR (ADDRESS COUNT)

/24 (256)

USABLE ADDRESS RANGE

192.168.2.0 - 192.168.2.255

add address space

NETWORK PREVIEW



CREATE A VIRTUAL NETWORK

Virtual Network Address Spaces

ADDRESS SPACE	STARTING IP	CIDR (ADDRESS COUNT)	USABLE ADDRESS RANGE
10.0.0.0/8	10.0.0.0	/8 (16777...	10.0.0.0 - 10.255.255.255
SUBNETS			
Subnet-1	10.0.0.0	/24 (256)	10.0.0.0 - 10.0.0.255
Gateway	10.0.1.0	/29 (8)	10.0.1.0 - 10.0.1.7
add subnet		add gateway subnet	

add address space

NETWORK PREVIEW

AzureSS-VPN

GATEWAY

OnPremNet

VPN

Microsoft Azure

CREDIT STATUS

duyguerduran@hotmail.com

AzureSS-VPN

DuyguNetwork

azures-vpn

DASHBOARD

CONFIGURE

CERTIFICATES

virtual network

AzureSS-VPN

GATEWAY

OnPremNet

VPN

THE GATEWAY WAS NOT CREATED.

resources

NAME	ROLE	IP ADDRESS	SUBNET NAME
------	------	------------	-------------

quick glance

Download VPN Device Script

STATUS
Created

SUBSCRIPTION ID
d6d48ddf-6001-4df2-ac22-39e2f88fc9...

VIRTUAL NETWORK ID
893d2e96-ae3f-4c5c-bfcb-390939b53a...

LOCATION

Static Routing

Dynamic Routing

CREATE GATEWAY

EXPORT

DELETE

Microsoft Azure | CREDIT STATUS | duyguerduran@hotmail.com

DASHBOARD CONFIGURE CERTIFICATES

virtual network

AzureSS-VPN Gateway OnPremNet VPN

DATA IN	DATA OUT	GATEWAY IP ADDRESS
0B	0B	191.236.91.220

resources

NAME	ROLE	IP ADDRESS	SUBNET NAME
------	------	------------	-------------

quick glance

Download VPN Device Script

2 OPERATIONS HAVE COMPLETED

DISMISS COMPLETED

✓ Successfully created a gateway for virtual network 'AzureSS-VPN'. OK

✓ Successfully created virtual network 'AzureSS-VPN'. OK

+ NEW DELETE GATEWAY CONNECT EXPORT MANAGE KEY DELETE

Download a VPN Device Configuration Script

Download a configuration script to help configure your local VPN device settings so that you can connect with the virtual network gateway.

VENDOR

Microsoft Corporation

PLATFORM

RRAS

OPERATING SYSTEM

Windows Server 2012 R2



```
Administrator: Windows PowerShell

PS C:\Users\Administrator> Add-WindowsFeature -name Routing -IncludeManagementTools

Success Restart Needed Exit Code      Feature Result
-----
True      No      NoChangeNeeded (C)

PS C:\Users\Administrator>
PS C:\Users\Administrator> # !!! NOTE: A reboot of the machine might be required here after which the script can be executed again.
PS C:\Users\Administrator> # Install S2S UPN
PS C:\Users\Administrator> Import-Module RemoteAccess
PS C:\Users\Administrator> if ((Get-RemoteAccess).UpnS2SStatus -ne "Installed")
>> {
>>     Install-RemoteAccess -UpnType UpnS2S
>> }
>>
PS C:\Users\Administrator> # Add and configure S2S UPN interface
PS C:\Users\Administrator> Add-UpnS2SInterface -Protocol IKEv2 -AuthenticationMethod PSKOnly -NumberOfTries 3 -ResponderAuthenticationMethod PSKOnly -Name 191.236.91.220 -Destination 191.236.91.220 -IPv4Subnet @"(10.0.0.0/8:100)" -SharedSecret 09s52W10zUhwkSPyTQgUBaCbeykKSHuw
PS C:\Users\Administrator>
PS C:\Users\Administrator> Set-UpnServerIPsecConfiguration -EncryptionType MaximumEncryption
WARNING: Configuration parameters will be modified after the Remote Access service is restarted.
PS C:\Users\Administrator>
PS C:\Users\Administrator> Set-UpnS2SInterface -Name 191.236.91.220 -InitiateConfigPayload $false -Force
PS C:\Users\Administrator>
PS C:\Users\Administrator> # Set S2S UPN connection to be persistent by editing the router.pbk file (required admin privileges)
PS C:\Users\Administrator> Set-PrivateProfileString $env:windir\System32\ras\router.pbk "191.236.91.220" "IdleDisconnectSeconds" "0"
PS C:\Users\Administrator> Set-PrivateProfileString $env:windir\System32\ras\router.pbk "191.236.91.220" "RedialOnLinkFailure" "1"
PS C:\Users\Administrator>
PS C:\Users\Administrator> # Restart the RRAS service
PS C:\Users\Administrator> Restart-Service RemoteAccess
WARNING: Waiting for service 'Routing and Remote Access (RemoteAccess)' to stop...
WARNING: Waiting for service 'Routing and Remote Access (RemoteAccess)' to stop...
PS C:\Users\Administrator>
PS C:\Users\Administrator> # Dial-in to Azure gateway
PS C:\Users\Administrator> Connect-UpnS2SInterface -Name 191.236.91.220
```

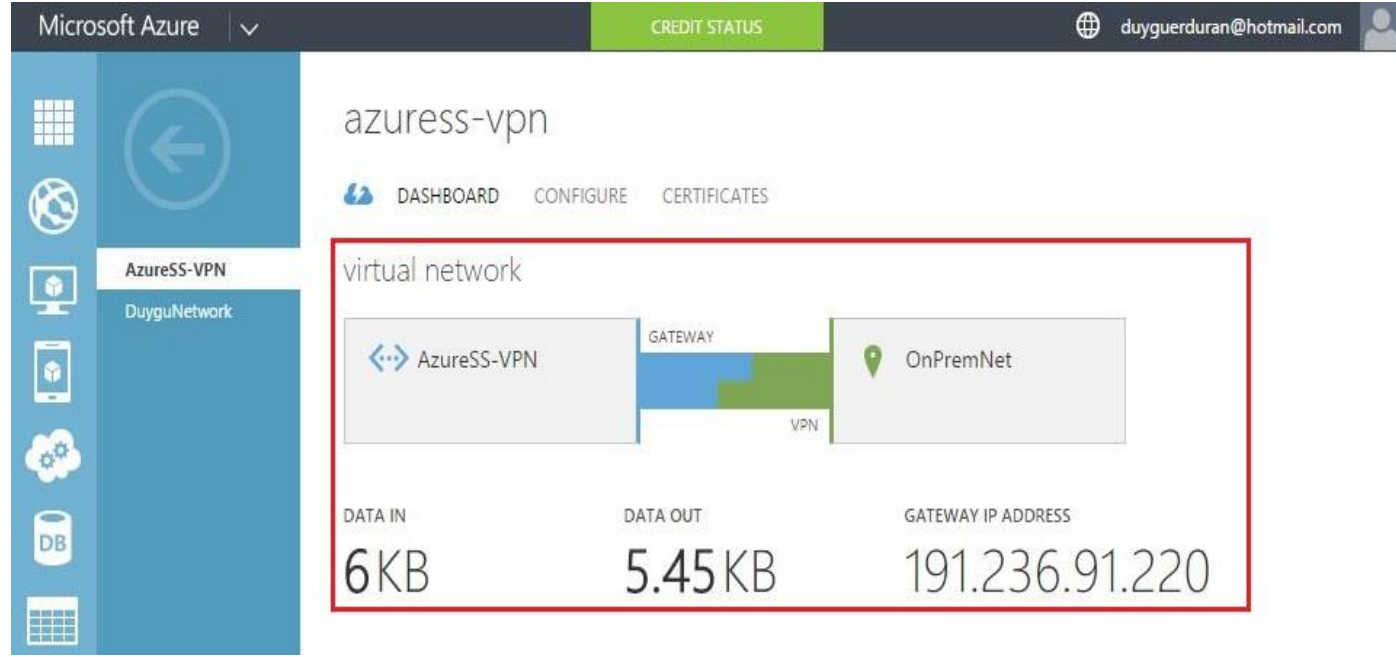
Routing and Remote Access

File Action View Help

Routing and Remote Access

- Server Status
- DUYGU (local)
 - Network Interfaces
 - Remote Access Clients (0)
 - Ports
 - Remote Access Logging
- IPv4
 - General
 - Static Routes
 - DHCP Relay Agent
 - IGMP
 - NAT
- IPv6

LAN and Demand Dial Interfaces	Type	Status	Connection State	Device Name
vEthernet (External)	Dedicated	Enabled	Connected	Hyper-V Virtual Ethernet Adapter
Loopback	Loopback	Enabled	Connected	
Internal	Internal	Enabled	Connected	
191.236.91.220	Demand-dial	Enabled	Connected	



OnPrem ile Azure yapım arasında Site-to-Site VPN bağlantısı kurulmuş durumdadır.

Böylece 2 farklı network etkileşim halinde olmaktadır. Sonrasında ise Azure Integration pack ile bağlanılarak tanıtılan azure bulut yapısı orchestrator organizasyonu içinde, runbooklarda kullanılmaya hazır hale gelmektedir.

DİNLEDİĞİNİZ İÇİN TEŞEKKÜR EDERİM

Hazırlayan: DUYGU ERDURAN