



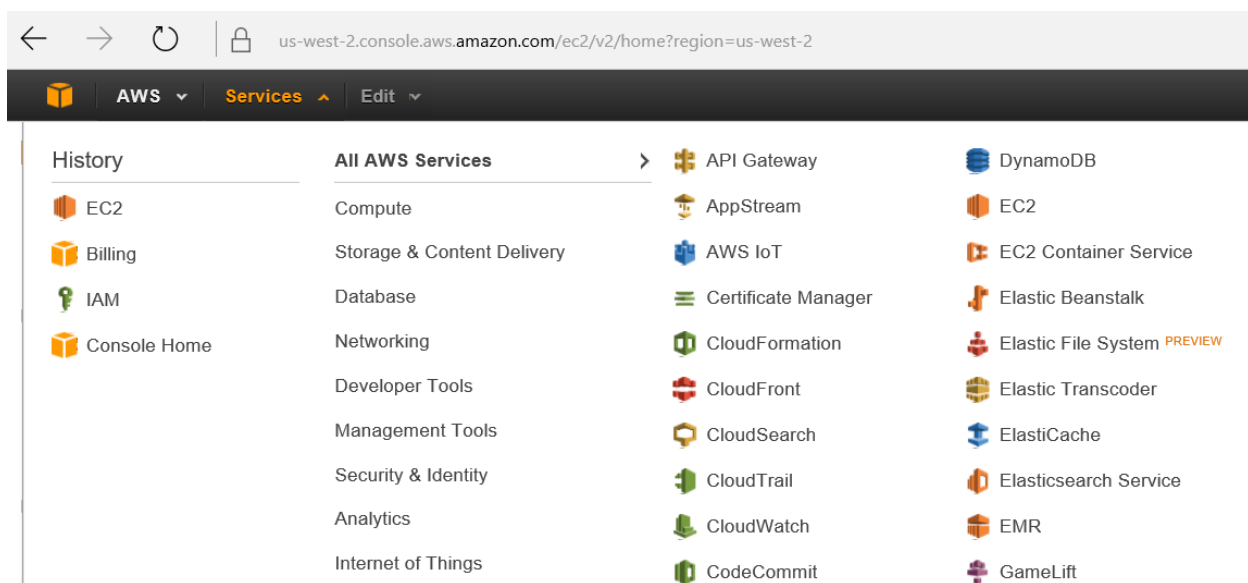
## Prototype Deployment

Instructions for deploying the prototype using the public AWS AMI available are provided below as well as instructions for setting up a Windows Server to deploy the prototype.

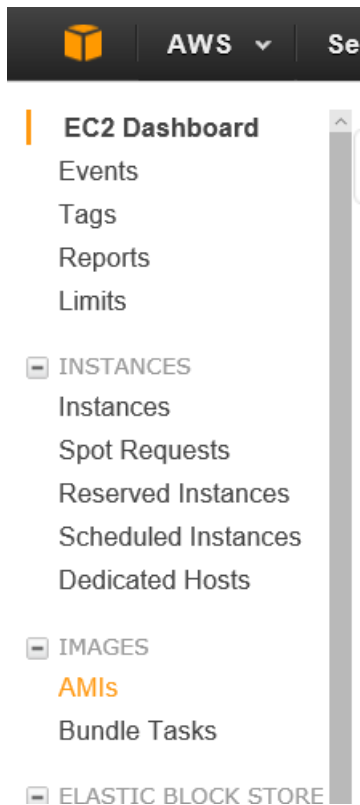
### AWS - AMI Deployment

Below are the steps for deploying the AMI to AWS

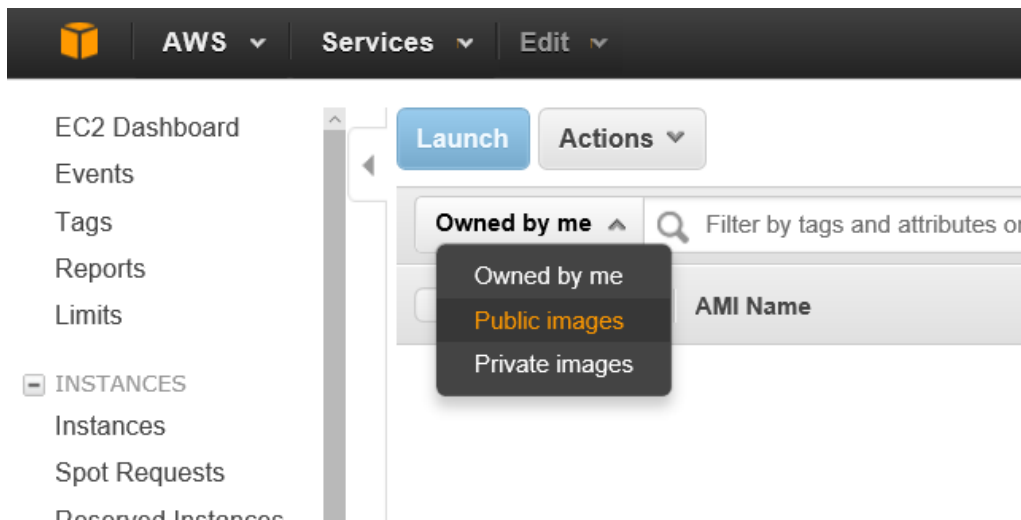
1. If you don't have an AWS account follow the steps below to create a free tier account in AWS
  - a. Go to [aws.amazon.com/free](https://aws.amazon.com/free) and create a free account
  - b. You will be asked to supply a credit card number in case your usage exceeds the free time allotted on the account. And you will be asked to provide a phone number to verify your identity.
  - c. Select the basic no cost support plan.
  - d. You are now ready to start an instance.
2. Login to your AWS Account
3. Under the services menu select EC2



4. On the left menu under images select AMI



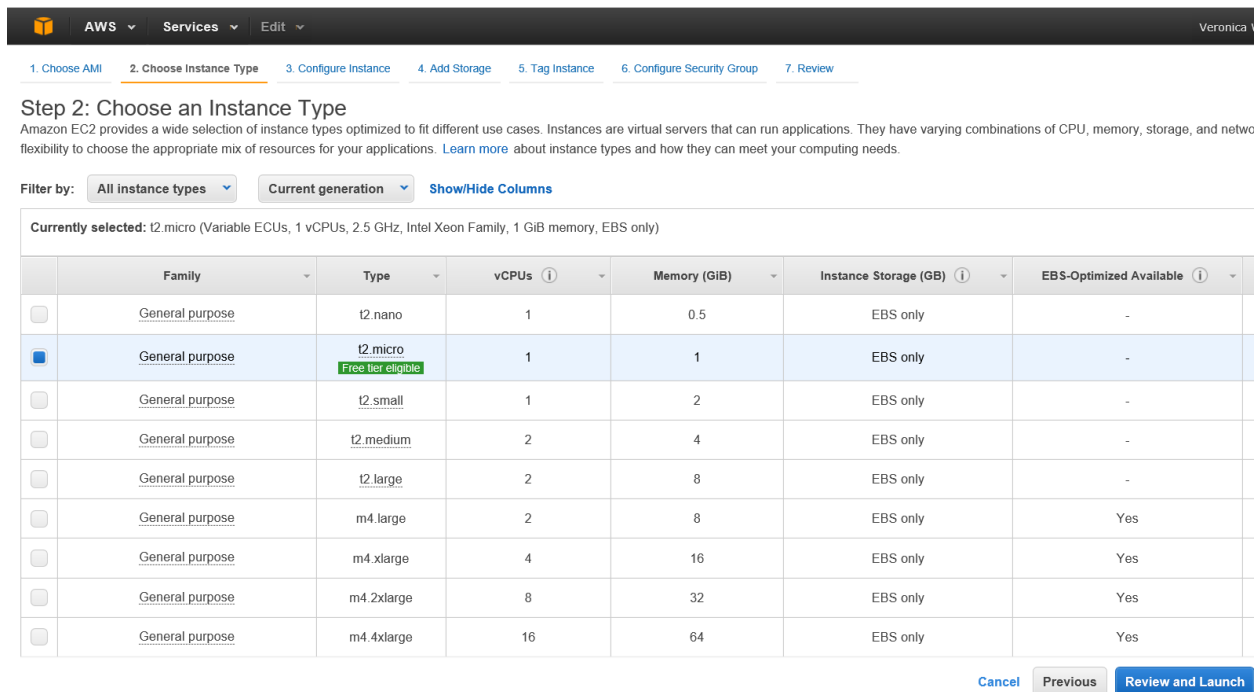
5. Select the option to search for public images



- Search for “natoma-hhs-prototype” as name of the ID of “ami-f8b44e98”. Once found select the launch button



- When you launch select the t2.micro and select review and launch



## 8. Click Launch

**Step 7: Review Instance Launch**  
Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

**Improve your instances' security. Your security group, launch-wizard-1, is open to the world.**  
Your instances may be accessible from any IP address. We recommend that you update your security group rules to allow access from known IP addresses only. You can also open additional ports in your security group to facilitate access to the application or service you're running, e.g., HTTP (80) for web servers. [Edit security groups](#)

**AMI Details** [Edit AMI](#)

**hhs-prototype-web - ami-2744bf47**  
Windows 2012 R2 web server with HHS prototype application  
Root Device Type: ebs Virtualization type: hvm

**Instance Type** [Edit instance type](#)

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

**Security Groups** [Edit security groups](#)

**Security group name** launch-wizard-1  
**Description** launch-wizard-1 created 2016-06-09T16:00:33.466-07:00

Type <sup>1</sup> Protocol <sup>1</sup> Port Range <sup>1</sup> Source <sup>1</sup>

[Cancel](#) [Previous](#) [Launch](#)

**NOTE:** We recommend you create a security group to limit RDP access to the server from your network, and only open port 80 to everyone – or limit to your network to restrict access.

## 9. When ready click the Launch button.

**Select an existing key pair or create a new key pair** ✕

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Proceed without a key pair ▼

☐ I acknowledge that I will not be able to connect to this instance unless I already know the password built into this AMI.

[Cancel](#) [Launch Instances](#)

10. Since this is for a public custom AMI, we are providing the Administrator Password:  
FAE=ETN\$KZT and as such the key pairs will not be able to be used to retrieve an Administrator password. Because of this, we suggest you proceed without a key pair.
11. Click “Launch Instances”
12. You will be given a status page and can wait about 5 minutes for the instance to launch

**Launch Status**

✓ **Your instances are now launching**  
The following instance launches have been initiated: [i-06fbb5805bf72dfe4](#) [View launch log](#)

ℹ **Get notified of estimated charges**  
[Create billing alerts](#) to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).

**How to connect to your instances**

Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

Click **View Instances** to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. [Find out](#) how to connect to your instances.

▼ Here are some helpful resources to get you started

- [How to connect to your Windows instance](#)
- [Learn about AWS Free Usage Tier](#)
- [Amazon EC2: User Guide](#)
- [Amazon EC2: Microsoft Windows Guide](#)
- [Amazon EC2: Discussion Forum](#)

While your instances are launching you can also

- [Create status check alarms](#) to be notified when these instances fail status checks. (Additional charges may apply)
- [Create and attach additional EBS volumes](#) (Additional charges may apply)
- [Manage security groups](#)

[View Instances](#)

13. Click View instances

**EC2 Dashboard**

Launch Instance Connect Actions

Filter by tags and attributes or search by keyword

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP	Key Name
	i-06fbb5805bf72dfe4	t2.micro	us-west-2a	running	Initializing	None	ec2-54-187-254-216.us...	54.187.254.216	HHSPrc

14. Refresh your view after about 5 minutes and once it has finished initializing you can verify the security group allows port 80 and then you can connect to the web site on the server.

The screenshot shows the AWS Management Console with the 'Instances' page selected. The instance 'i-06fb5805bf72dfe4' (Myhhsprototype) is in the 'running' state. The 'Security Groups' tab is active, showing the 'launch-wizard-1' security group. The instance details include:

- Instance ID: i-06fb5805bf72dfe4
- Instance state: running
- Instance type: t2.micro
- Private DNS: ip-172-31-17-165.us-west-2.compute.internal
- Private IPs: 172.31.17.165
- Secondary private IPs: VPC ID: vpc-53b72637, Subnet ID: subnet-bd1a8dd9
- Network interfaces: eth0
- Source/dest. check: True
- Public DNS: ec2-54-187-254-216.us-west-2.compute.amazonaws.com
- Public IP: 54.187.254.216
- Elastic IP: -
- Availability zone: us-west-2a
- Security groups: launch-wizard-1, view rules
- Scheduled events: No scheduled events
- AMI ID: hhs-prototype-web (ami-2744b447)
- Platform: windows
- IAM role: -
- Key pair name: HHSPrototypeDemo

15. Click on the Security Group Name

The screenshot shows the AWS Management Console with the 'Security Groups' page selected. The security group 'sg-90c815f6' (launch-wizard-1) is shown. The 'Inbound' tab is active, showing a single rule:

Type	Protocol	Port Range	Source
RDP	TCP	3389	0.0.0.0/0

16. Scroll down and add http inbound by clicking Edit

**Edit inbound rules**

Type	Protocol	Port Range	Source
RDP	TCP	3389	Anywhere 0.0.0.0/0

Add Rule Cancel Save

17. Click Add Rule

**Edit inbound rules**

Type	Protocol	Port Range	Source
RDP	TCP	3389	Anywhere 0.0.0.0/0
HTTP	TCP	80	Anywhere 0.0.0.0/0

Add Rule Cancel Save

18. Select HTTP and then click Save

19. Now you can go to the web site on the server by using the public IP address

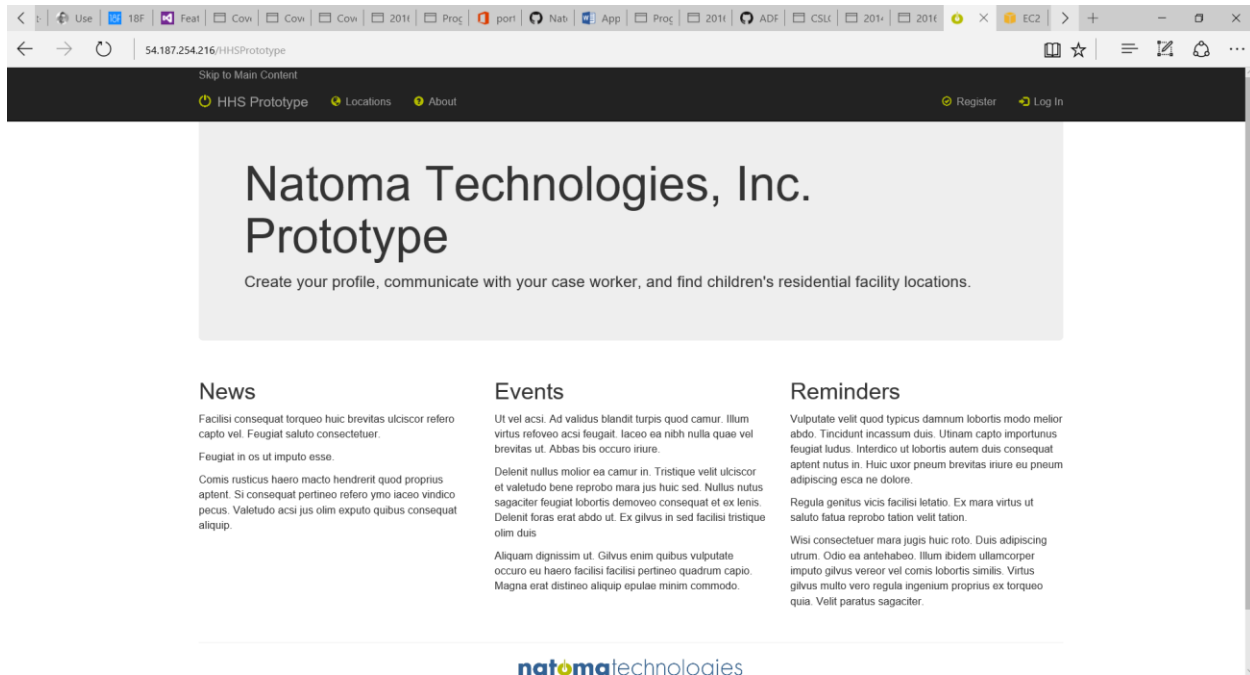
Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP	Key Name
	i-06fbb5805bf72dfe4	t2.micro	us-west-2a	running	2/2 checks...	None	ec2-54-187-254-216.us...	54.187.254.216	HHSPrc

For instance, in the example above the public IP is 54.187.254.216 the site address for the prototype is:

<http://54.187.254.216/HHSPrototype/>

**NOTE:** This server was created to demonstrate the installation only and will not be active for you to visit

20. The first time you access the site it will take longer for the site to start up.



21. The prototype is now deployed and ready for use!

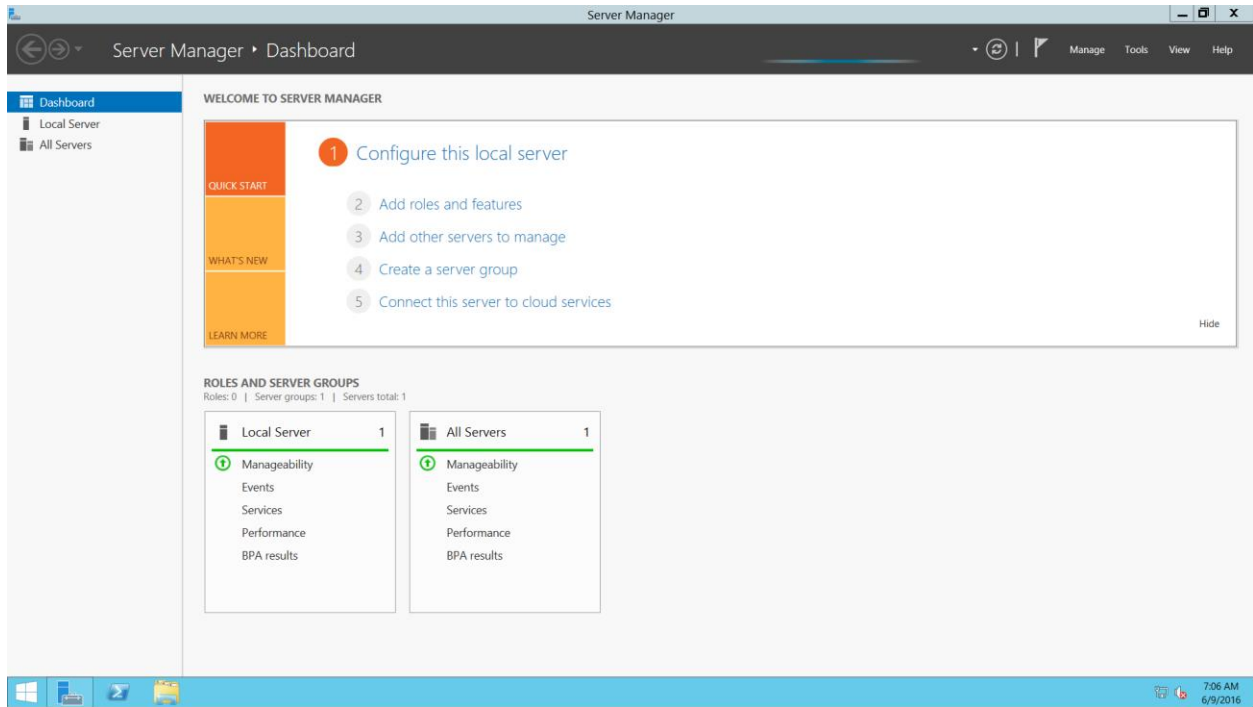
22. If you need to login to the instance to access the files directly the Administrator password is:  
FAE=ETN\$KZT

### Deploy Manually to a Windows Server

To deploy manually to a Windows Server you must first make sure the server has the appropriate roles installed.

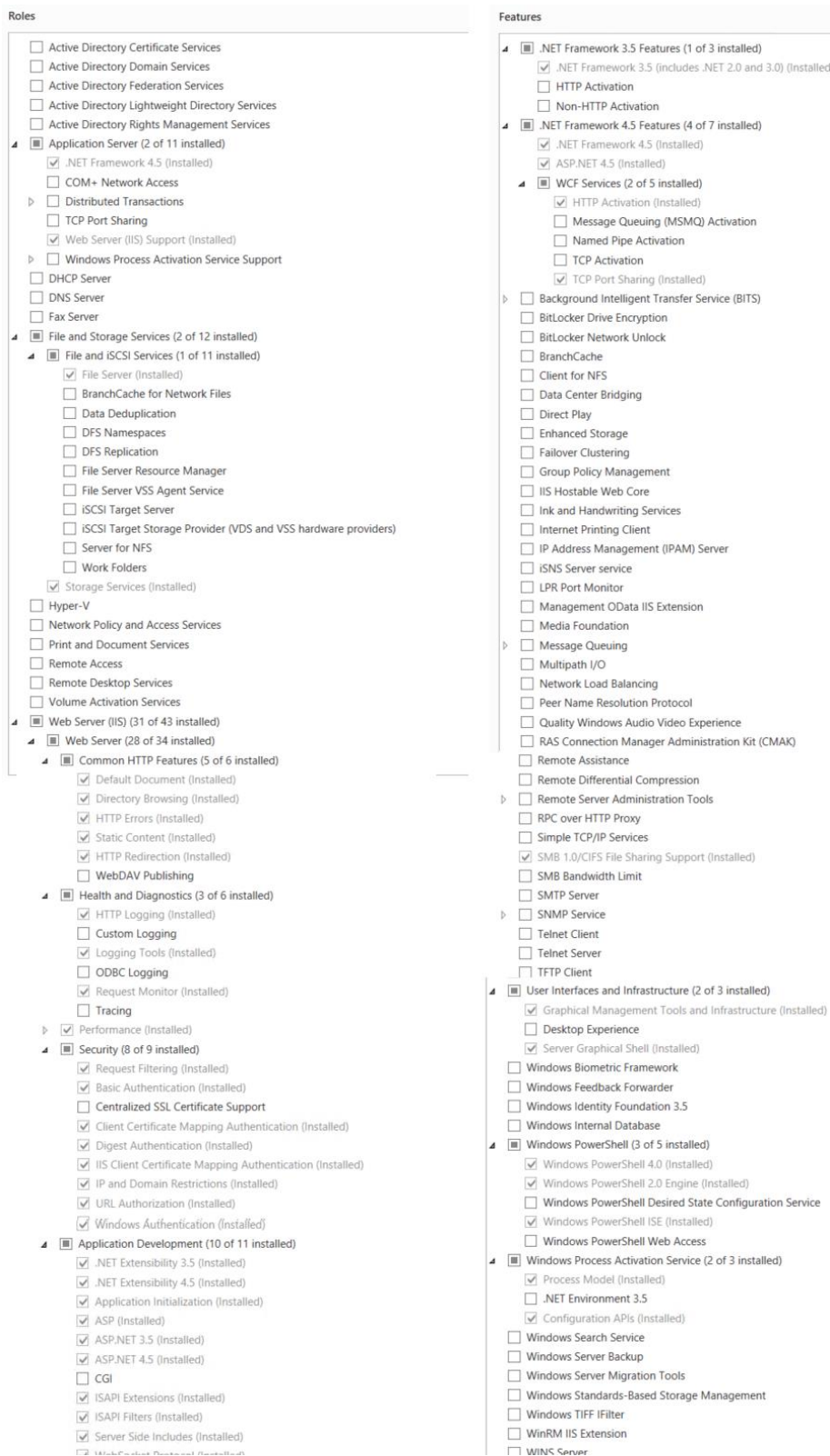


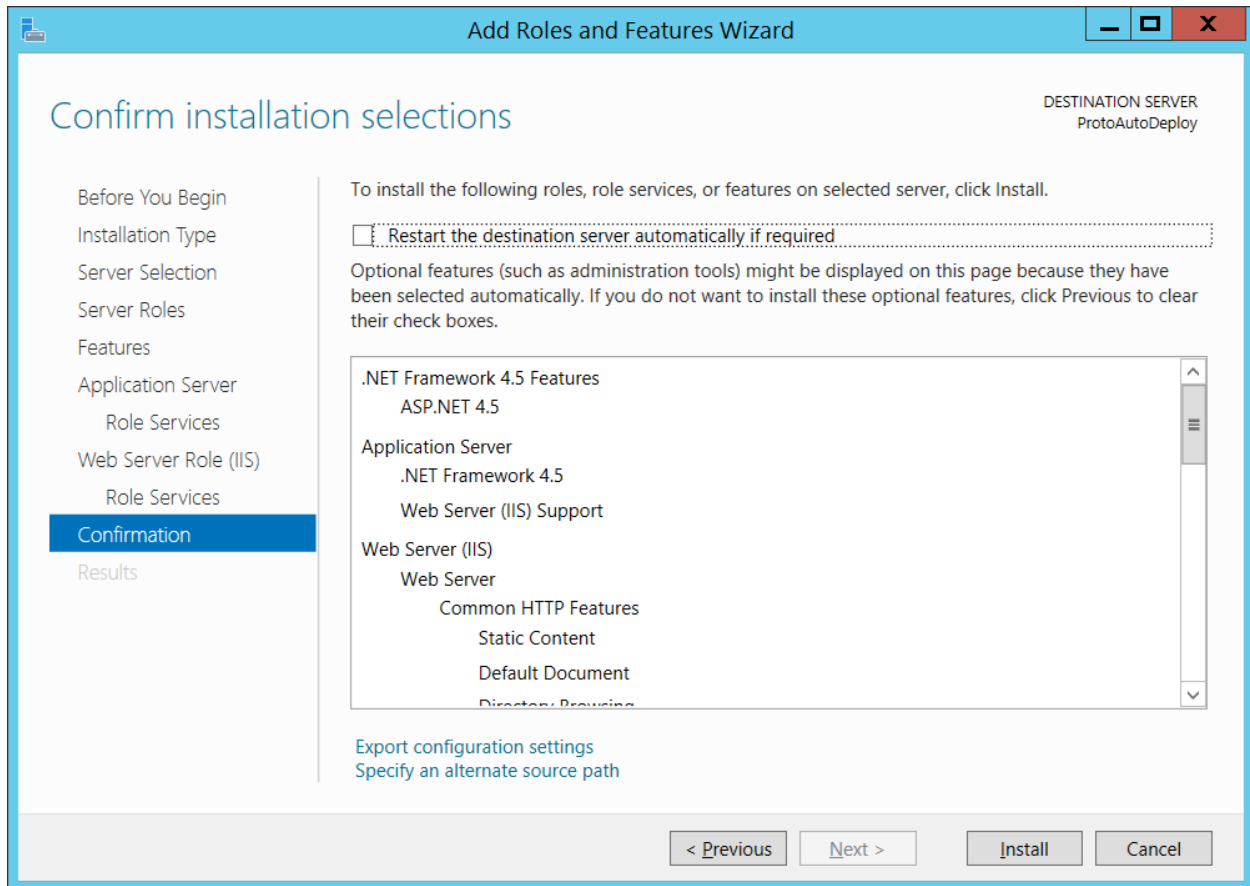
## 1. Go to Server Manager on the Server



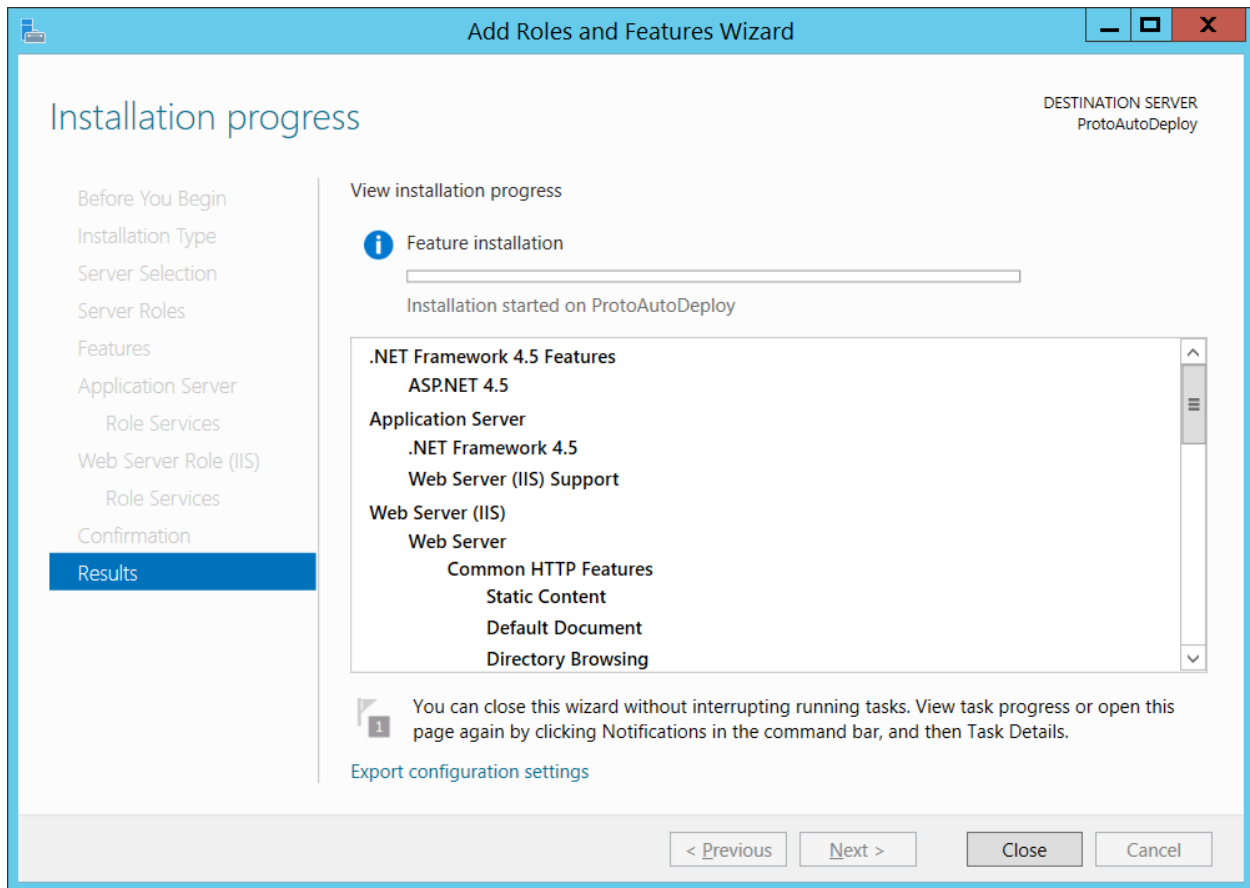
## 2. Click Add Roles and Features

### 3. The following screen shows the server roles and features that should be installed:



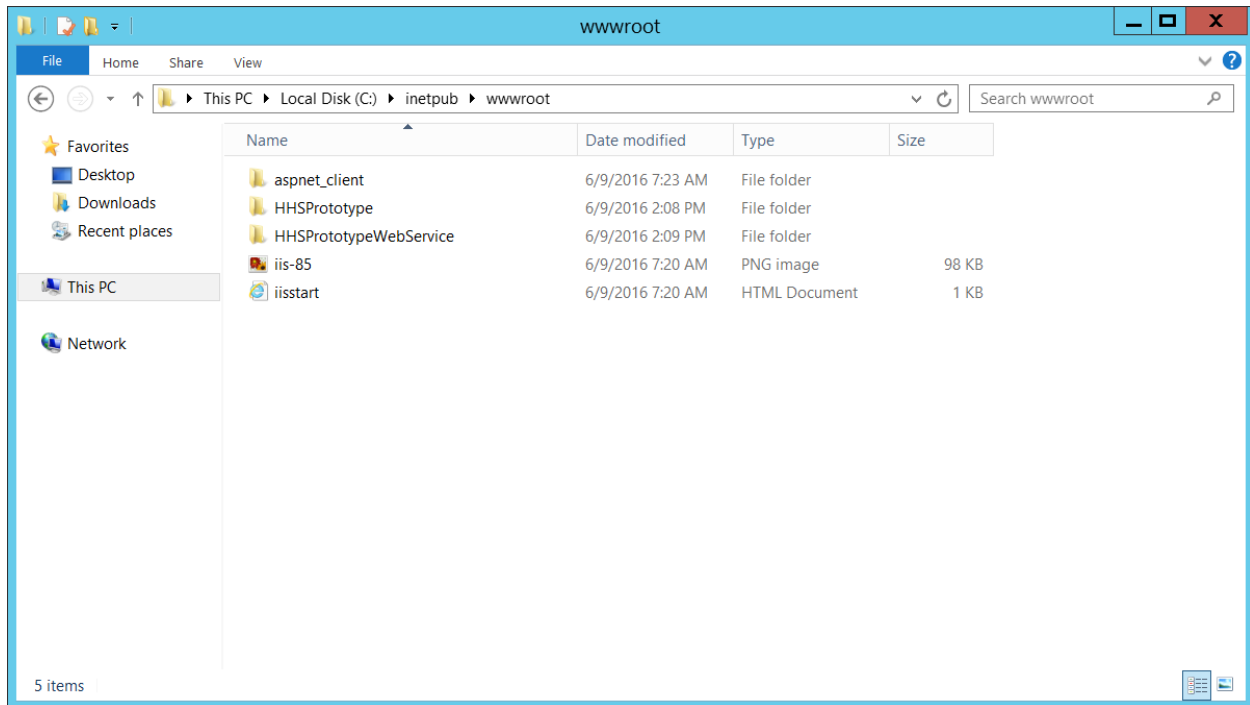


## 4. Click install

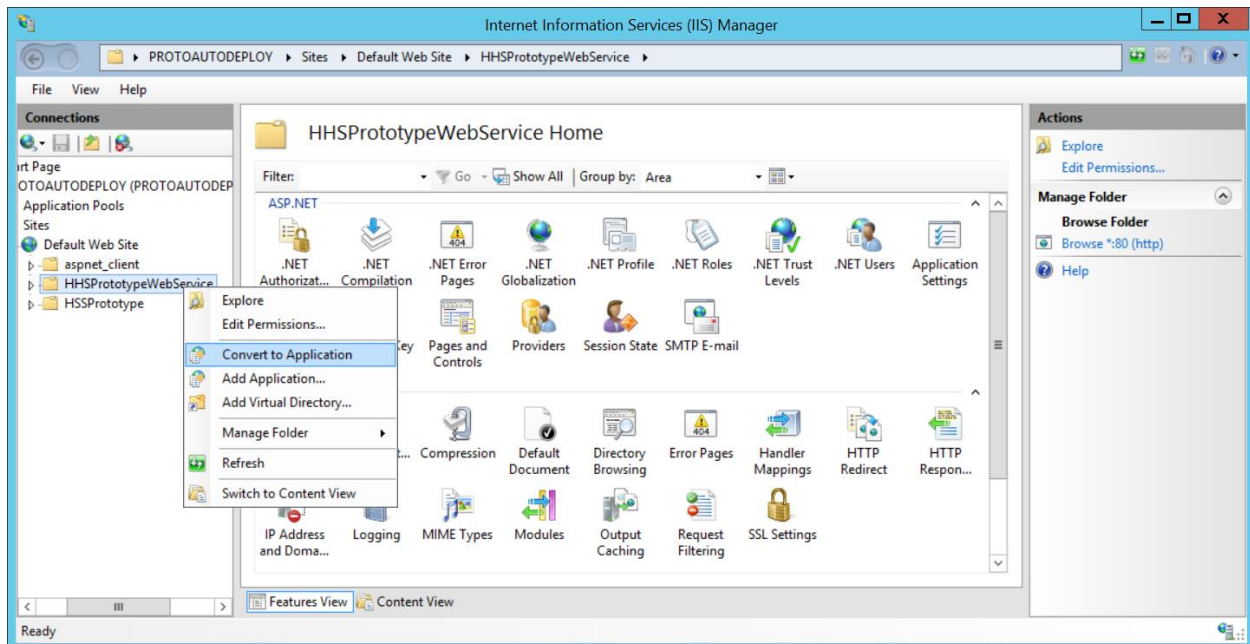


## 5. Open File Explorer and create two folders under wwwroot in inetpub:

- HHSPrototype and
- HHSPrototypeWebService



6. Open IIS
7. And Navigate to Default Web Site, find the folders and right click and select
8. Select the HHSPrototypeWebService folder, Right Click and select Convert to Application

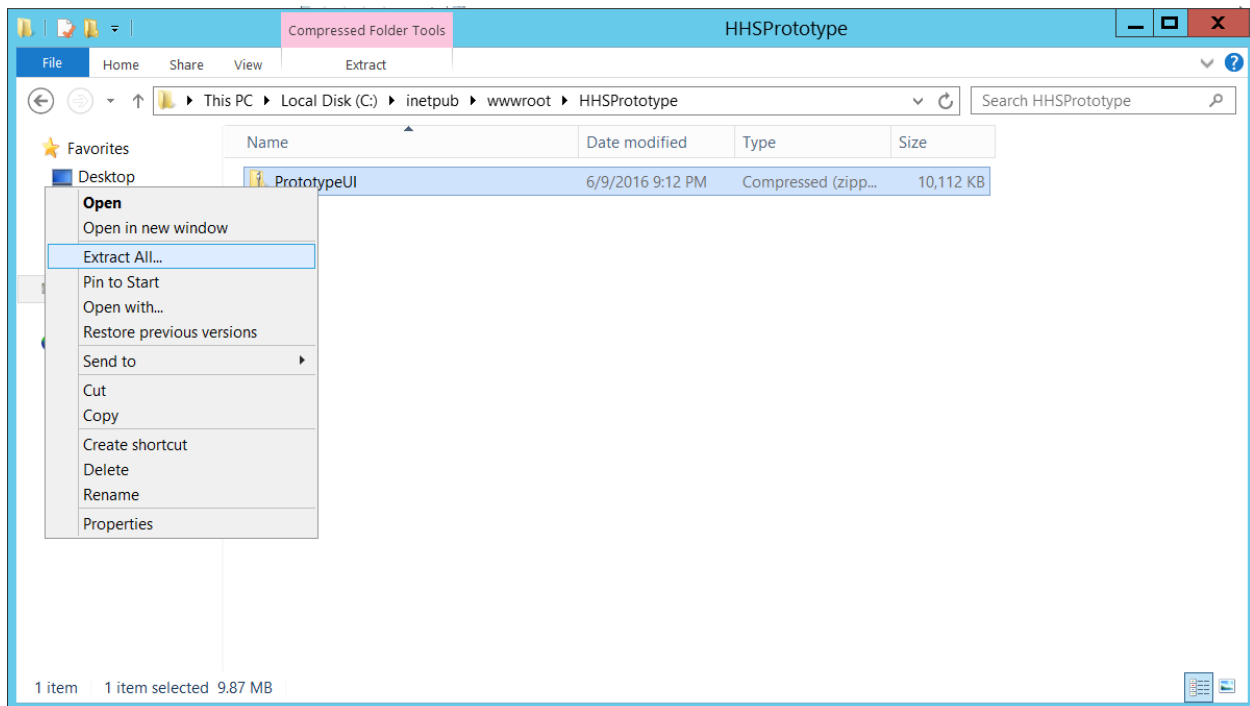


9. Select HHSPrototype and do the same

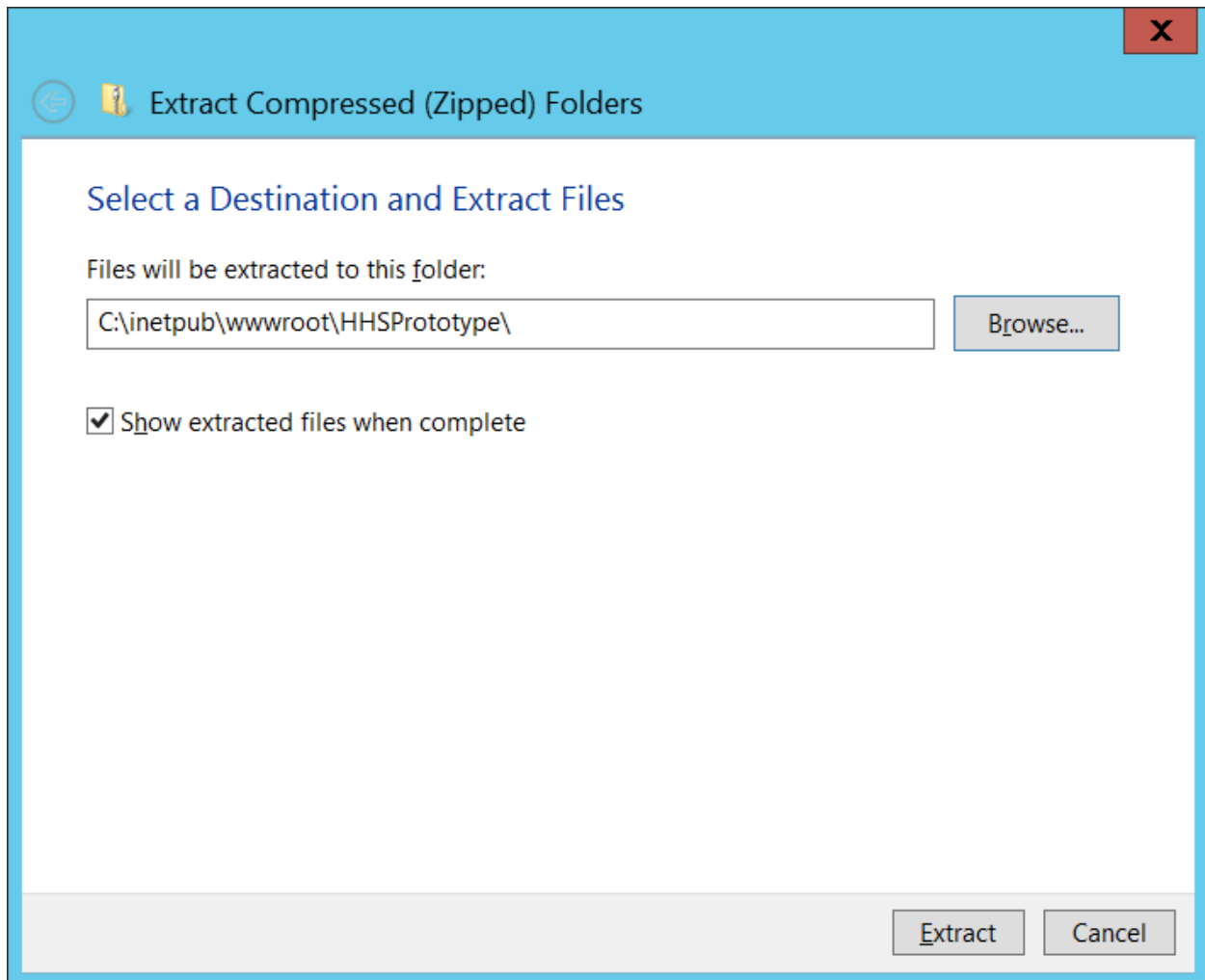
The screenshot shows the 'Add Application' dialog box in IIS Manager. The dialog has a title bar with a question mark and a close button. The main content area contains the following fields and controls:

- Site name:** Default Web Site
- Path:** /
- Alias:** HHSPrototype (highlighted with a blue selection box)
- Application pool:** DefaultAppPool
- Select...** button (next to the application pool)
- Example:** sales
- Physical path:** C:\inetpub\wwwroot\HHSPrototype
- ...** button (next to the physical path)
- Pass-through authentication** section with two buttons: **Connect as...** and **Test Settings...**
- ☐ **Enable Preload**
- OK** and **Cancel** buttons at the bottom right.

10. Copy the PrototypeUI.zip file into the HHSPrototype folder and extract in place:

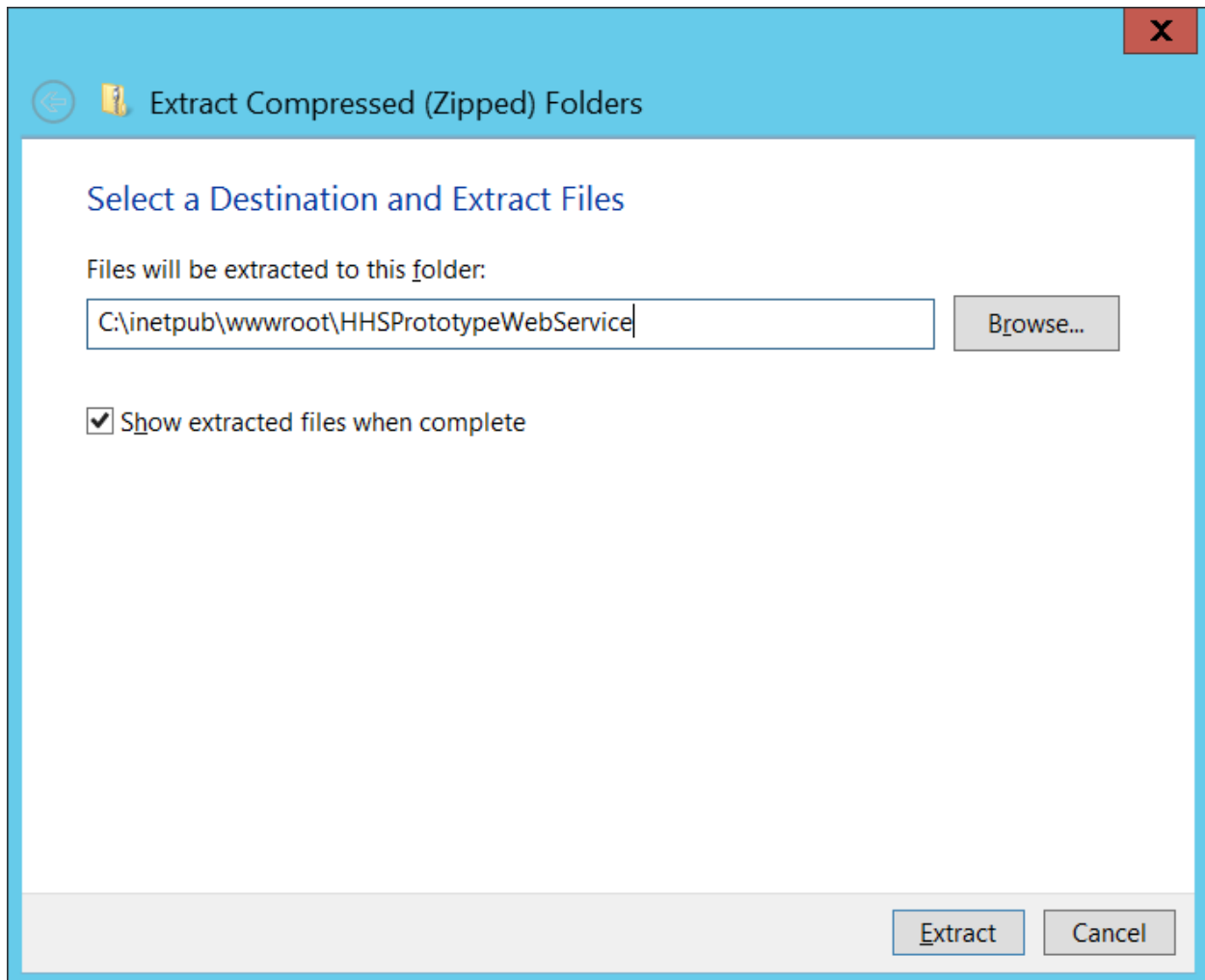


11. Do not create another folder under HHSPrototype



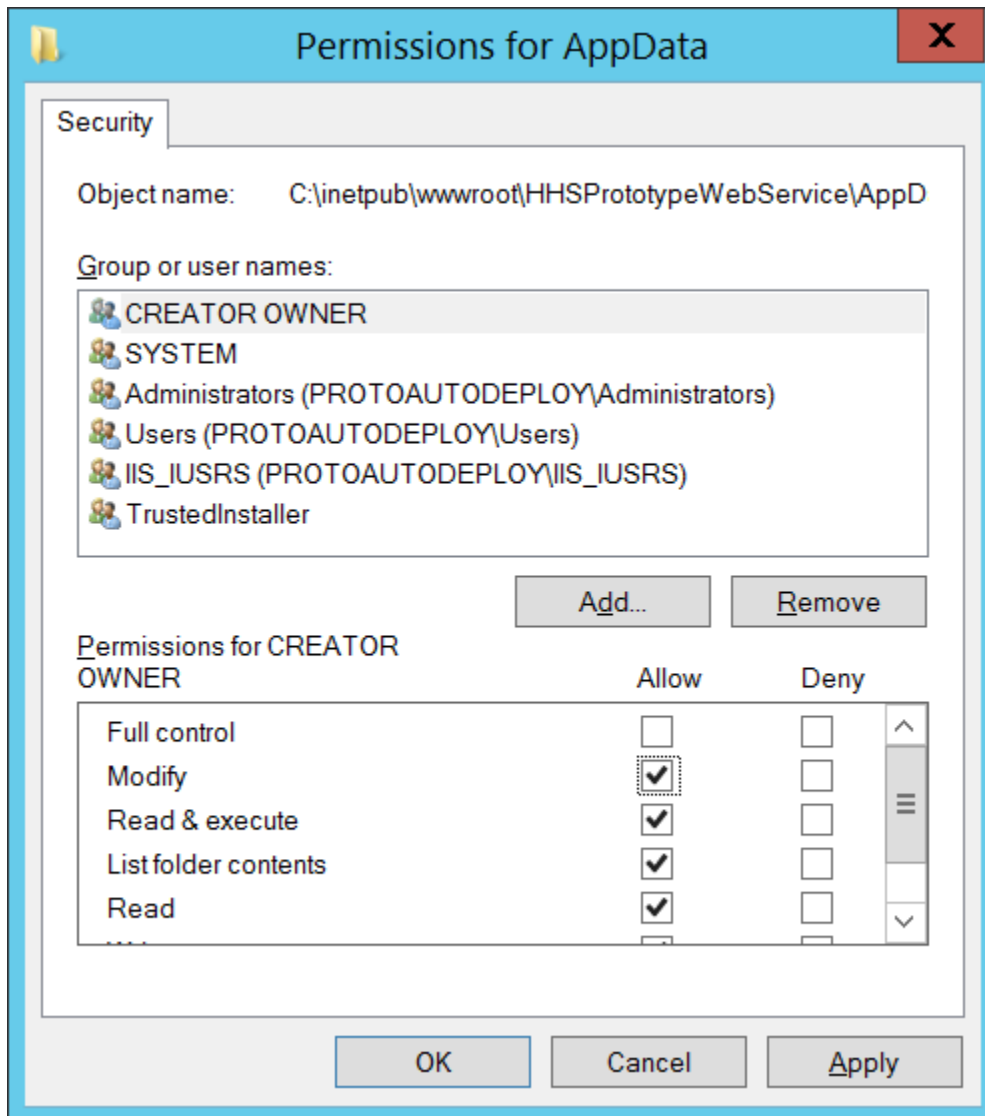


12. Do the same for the PrototypeWebService.zip file in the HHSPrototypeWebService folder.



13. Create a folder to store the data that will be written.

14. On this folder give permissions to the IIS\_IUSRS to Create, Read and Modify



15. Open the web.config file in the HHSPrototypeWebService folder and set the following value to the name of the directory you created:

```
<add key="saveDirectory" value="" />
```

16. Open the web.config file in the HHSPrototype folder, if you did not install the web service as an application called "HhsPrototypeWebService" you will need to modify the endpoint:

```
<client>
```

```
<endpoint address="http://localhost/HhsPrototypeWebService/ProtoProcSvc.svc"
```

```
binding="basicHttpBinding"
```

```
bindingConfiguration="BasicHttpBinding_IProtoProcSvc"
```

```
        contract="HhsPrototypeProc.IProtoProcSvc"  
        name="BasicHttpBinding_IProtoProcSvc" />  
    </client>
```

17. Make sure .NET framework 4.6.1 is installed on the server:

<https://www.microsoft.com/en-us/download/confirmation.aspx?id=49981>