

LAB08: Enroll your Windows Server 2012/ R2 machines for Extended Security Updates with Azure Arc

Student Lab Manual

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Exercise 1 - Enable Extended Security Updates (ESU) license

Objective

In this module, you will learn how to enable Extended Security Updates (ESU) for Azure Arc-enabled Windows Server 2012 R2 through the Azure portal.

Estimated Time to Complete This Lab

30 minutes

Explanation

Once Windows Server 2012 and 2012 R2 are registered as Azure Arc-enabled servers, you can enroll them for ESU via the Azure portal, connect through Azure Arc, and you'll be billed monthly via your Azure subscription.

Documentation

[Deliver Extended Security Updates for Windows Server 2012](#)

[License provisioning guidelines for Extended Security Updates for Windows Server 2012](#)

>[!knowledge] To continue receiving security updates after extended support has ended on October 10, 2023, you must have a [servicing stack updates (SSU)] (<https://support.microsoft.com/topic/kb5031043-procedure-to-continue-receiving-security-updates-after-extended-support-has-ended-on-october-10-2023-c1a20132-e34c-402d-96ca-1e785ed51d45>) installed. It will be installed through Windows Update for September 2023, or through Microsoft Update Catalog or Windows Server Update Services.

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Task 1: Create a ESU license

1. [] Navigate to the Azure Arc page

The screenshot shows the Microsoft Azure search interface with the query 'azure arc'. The results list several services under the 'Services' category, with 'Azure Arc' being the top item and highlighted by a red box. Other listed services include 'Azure Arc data controllers', 'Azure Arc Private Link Scopes', 'Machines - Azure Arc', 'Kubernetes - Azure Arc', 'SQL Server - Azure Arc', and 'Azure Database for MySQL servers'. Below the services, there are sections for 'Resources' (with 'Azure Arc-enabled servers') and 'Marketplace' (listing various Azure Arc-related offerings like 'Kubernetes - Azure Arc', 'Virtual machine - Azure Arc (preview)', etc.).

2. [] Select *Windows Server ESU licenses* in the left pane. Then click on *Create Extended Security Updates - Windows Server 2012/R2*

This screenshot shows the 'Azure Arc | Windows Server ESU licenses' page. On the left, a navigation sidebar is open, showing categories like 'API management (preview)', 'Event Grid topics (preview)', 'Functions (preview)', 'Logic apps (preview)', and 'Licenses'. Under 'Licenses', 'Windows Server ESU licenses' is selected and highlighted with a red box. The main content area displays a message: 'No Extended Security Updates - Windows Server 2012/R2 to display. Create and attach an Extended Security Updates (ESU) license to eligible Arc-enabled machines to continue receiving critical security updates automatically.' Below this message is a prominent blue button labeled 'Create Extended Security Updates - Windows Server 2012/R2', which is also highlighted with a red box.

3. [] Provision Windows Server 2012 and 2012 R2 Extended Security Update licenses from Azure Arc.

[!alert] Make sure to select "Activate later" for the license settings to avoid getting billed on the Azure Subscription

Home > Azure Arc | Extended Security Updates >

Create an Extended Security Updates license

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ

Resource group * ⓘ ArcBox-Levelup

Instance details

License name * ArcBox-ESU

Activate license Activate now
Start the billing cycle today. This license can be used to enable ESUs on eligible resources immediately.

Activate later
ESUs and billing won't start until the license is activated.

Region * ⓘ (US) East US

License details

Provide the core type and pack amount needed for this ESU license. The minimum number of cores is 16 for physical and 8 for virtual core license. Once activated, the monthly cost will be calculated and billed to your Azure subscription. You can edit the number of cores later. [Learn more](#)

SKU * Windows Server 2012 or 2012 R2 Standard Edition

Core type * ⓘ Virtual cores

Core packs	Amount needed
16 cores	0
2 cores	4
Total cores	8

Estimated cost ⓘ Your total cost will be dependent on your SKU and total number of cores, [Learn more](#) ↗

Ensure that your Windows Server licenses have Software Assurance, your Windows Server licenses are acquired as subscription licenses, or you are covering WS workloads running on Authorized Mobility Partners' servers under license included offerings. [Learn more](#) [Give feedback](#)

[!hint] When opting for ESU via Azure Arc for Windows Server, you have two licensing choices:

- vCore Licensing:** Pay based on the number of virtual cores (vCores) utilized by the operating system. This option uses the Standard edition rate. If you're operating multiple VMs, the cost will be calculated based on the total number of vCores across all VMs. **There is an 8-core minimum per VM for vCore licensing.**
- pCore Licensing:** Pay based on the number of physical cores (pCores) utilized by the host operating system. This option can use either edition. Note that with pCore licensing, up to 2 guest VMs running on a WS Standard host are covered (additional VMs require additional ESU)

licenses). With the WS Datacenter host, all VMs are covered without the need for additional licenses. **There is a 16-core minimum per server for pCore licensing.**

Please see [here](#) for details.

4. [] In this lab environment you will not be able to create an actual license due to the cost involved with back-billing. So when you attempt to create the license you should see the following message:

The screenshot shows the 'Azure Arc | Windows Server ESU licenses' page. On the right, a red box highlights a modal window titled 'Create ESU License' with the error message: 'Failed creating ESU license 'testesu'. Error: Resource 'testesu' was disallowed by policy. Policy identifiers: [{}"policyAssignment": {"name": "Arc-WSPLUS-...}].'

Task 1 has been completed

Click **Next** for the next task or [Go back to the main table of content](#)

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Task 2: Link ESU license to Arc-enabled servers

[!alert] Since this lab environment does not allow the creation of an actual ESU license, you will not be able to link it to any Arc-enabled machine. So the guidance in this task is just informational and you will not have a Windows server 2012 machine provisioned within this lab.

1. [] Select one or more Arc-enabled servers to link to an Extended Security Update license.

The screenshot shows the 'Azure Arc | Extended Security Updates' page. On the right, a red box highlights the 'Enable ESUs' button in the toolbar. The table below lists one record: 'JSWin2K12Base' with 'Not enabled' status.

Name	ESU status	Operating system	Resource group	Subscription	Arc agent status	Resource type
JSWin2K12Base	Not enabled	Windows Server 2012 R2 Standard	ArcBox-LevelUp		Connected	microsoft/hybridcompute/machines

The screenshot shows the Azure Arc | Extended Security Updates blade. The 'Eligible resources' tab is selected, displaying a single record: 'JSWin2K12Base' with 'Not enabled' status, running 'Windows Server 2012 R2 Standard' in the 'ArcBox-Levelup' resource group. To the right, a modal window titled 'Enable Extended Security Updates' is open, allowing configuration of the machine type ('Core type: Virtual cores') and license ('ESUs license: ArcBox-ESU'). The 'Enable' button at the bottom of the modal is highlighted.

2. [] The status of the selected machines changes to **Enabled**.

The screenshot shows the Azure Arc | Extended Security Updates blade. The 'Eligible resources' tab is selected, displaying the same record: 'JSWin2K12Base' with its 'ESU status' now set to 'Enabled' (indicated by a green checkmark). The rest of the interface, including the search bar, filters, and the right-hand pane, remains consistent with the first screenshot.

[!hint] Once you've linked a server to an activated ESU license, the server is eligible to receive Windows Server 2012 and 2012 R2 ESUs.

Task 2 has been completed

Congratulations, you have completed all tasks in this lab

Click **Next** for the next lab or [Go back to the main table of content](#)