

Microsoft Azure Site Recovery Licensing White Paper

Overview

Microsoft Azure Site Recovery (ASR) can help protect your most important services by coordinating the automated replication and recovery of protected instances at a secondary site. The ongoing replication of each instance is provided by Windows Server 2012 R2 Hyper-V Replica in the case of virtual machines (VMs) running on Hyper-V 2012 R2, and Scout in the case of non-virtualized instances or instances running on VMware. In the event of an outage at the primary site, protected instances can be brought up in an orchestrated fashion to help restore service quickly at the recovery site.

[Scout](#) is a deployment option for protecting instances that are licensed through ASR. Scout adds the ability to protect physical instances as well as virtual instances running in VMware environments.

Business Model

ASR is sold based on the number of instances protected depending on the recovery site destination:

- *Site to site (S2S)*: Per-instance charge when recovering a service from any site to the end customer or service provider data center.
- *Site to Azure (S2A)*: Per-instance charge when recovering to Azure as the recovery site. Price includes 100 GB of replication and storage capacity on Azure, and a guaranteed recovery time objective (RTO).

	S2S	S2A
Orchestration	✓	✓
Replicate to Azure capacity (100 GB)		✓
Guaranteed recovery time objective (RTO)		✓
Monthly pay-as-you-go price	\$16 / instance	\$54 / instance

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Licensing ASR for Different Recovery Scenarios

For additional detail, see the [Licensing ASR for Different Recovery Scenarios](#) section of the FAQ.

ASR Meters / SKUs That Apply to Each Recovery Scenario

Service Providers are charged based on the number of instances (physical or virtual) that they are protecting. There are separate meters for recovering to Azure versus Service Provider-owned sites to reflect the differences in value proposition and costs incurred associated with each scenario. The source of the production workload does not affect the ASR meter that will be charged.

Recover to	Value components			
	ASR Meter	Orchestration	Storage of Instance	RTO Guarantee
Azure (S2A)	S2A	Yes (ASR)	100 GB / instance*	Yes
Service Provider (S2S)** (dedicated or shared hardware)	S2S	Yes (ASR)	Your infrastructure	You decide
End Customer (S2S, A2S)***	S2S	Yes (ASR)	Customer infrastructure	Customer infrastructure

* When purchased through the Enterprise Agreement (EA) plan SKU. Usage through other programs or from EA monetary commitment will not receive the 100 GB of storage entitlement.

**A Service Provider that is backing up either their own infrastructure—or an end customer’s—with ASR to a secondary data center (not Azure) will be metered at the S2S price.

*** End Customers who are backing up from any location to their own data center will also be metered based on the S2S pricing.

TERMINOLOGY

- **Site to Site (S2S) scenario:** Use of ASR to automate the replication and recovery of a protected instance from an on-premises primary site owned by an End-Customer or Service Provider to an on-premises recovery site.
- **Site to Azure (S2A):** Use of ASR to automate the replication and recovery of a protected instance from the enterprise or Service Provider on-premises primary site to Azure as the recovery site. The instance is stored in Azure geo-redundant storage (GRS) until it is recovered.
- **Recovery Point Objective (RPO):** A minimum acceptable data loss in the event of a failure.
- **Recovery Time Objective (RTO):** Time within which a service is restored after a failure.

Consumption versus Plan Offer Types

ASR is available through two offer types. Scout usage is currently available only via ASR m Plan SKUs. Pricing for Consumption and Plan offers is currently the same.

Offer type	Description	Benefit of this option	Direct*	Open	EA
Consumption	A way to pay for Azure services based on actual usage on a monthly basis.	Flexibility when service usage varies or is difficult to predict.	Yes	Yes	Yes (via monetary commitment)
Plan	A way to purchase a specific quantity of a specific service for a discrete period of time (typically a year).	Certainty that the desired quantity of the service is available. Ease of managing the procurement of the service.	No	No	Yes (via separate SKUs on Price List)

Note: Scout usage is currently not metered through the ASR online service. As a result, Scout usage is available only through the ASR Plan SKUs that can be purchased in EA. Scout usage cannot currently be licensed through ASR Consumption offers in any channel.

ASR Pricing

Charges are based upon on the number of instances being protected. There are separate meters for the S2S and S2A usage scenarios to reflect the differences in the costs and value of the solution. As mentioned above, pricing for Consumption and Plan offers are currently the same. When purchasing through a Microsoft Enterprise Agreement, additional savings are reflected in the pricing, based on your Enterprise Agreement price level. For more information, consult your Microsoft sales representative.

	Site to Site per instance / year (month)	Site to Azure per instance / year (month)
Direct pay-as-you-go	US\$192 (\$16.00)	US\$650 (\$54.00)

TERMINOLOGY (CONTINUED)

- **Primary site:** The site at which the production VM runs before a recovery.
- **Recovery site:** The site to which the protected VM is replicated, and ultimately recovered.
- **Recovery/failover:** The process of reading the replicated VM from disk and starting the VM at the recovery site.
- **Test failover:** Recovering the VM at the recovery site for the purpose of testing whether the recovery will work. The production VM continues to run at the primary site.
- **Planned failover:** Recovering a VM at the recovery site to migrate the production VM. For example, migrating all VMs off the primary site for a hardware upgrade.
- **Unplanned failover:** Recovering the VM at the recovery site in the event of a failure at the primary site.

Licensing Microsoft Server Products for Disaster Recovery

It is important to note that when an instance protected by ASR is recovered at the recovery site, the software running inside the protected instance must be properly licensed as well. The end customer needs to license Microsoft server products as follows, depending on the recovery site selected.

	On-Premises*	Service Provider Dedicated Hardware	Service Provider Shared Hardware	Azure
Windows Server	<ul style="list-style-type: none"> Fully licensed servers, or End Customer licenses, via Disaster Recovery Software Assurance benefit 	<ul style="list-style-type: none"> Service Provider provides via Services Provider License Agreement (SPLA) End Customer licenses, via Disaster Recovery Software Assurance benefit (e.g., dedicated outsourcing) 	<ul style="list-style-type: none"> Service Provider licenses via SPLA 	<ul style="list-style-type: none"> Right to run Windows Server is included in all Windows Server versions of Azure compute instance offerings
Other Microsoft Servers (SQL, Exchange, SharePoint, etc.)	<ul style="list-style-type: none"> Fully licensed servers, or End Customer licenses, via Disaster Recovery Software Assurance benefit 	<ul style="list-style-type: none"> Service Provider provides via SPLA End Customer licenses, via Disaster Recovery Software Assurance benefit (e.g., dedicated outsourcing) 	<ul style="list-style-type: none"> Service Provider licenses via SPLA 	<ul style="list-style-type: none"> The Disaster Recovery Software Assurance Benefit applies to Microsoft server products protected with Azure Site Recovery. This change was made in the January 2015 Product Use Rights (PUR).

*On premises can be used to describe both an end customer or service provider environment, as long as it is for their own usage and is not resold.

ASR at a Glance

For additional detail, see the [Licensing the Azure Site Recovery Service](#) section of the FAQ.

ASR provides a flexible business continuity and disaster recovery as a service option that Service Providers can take advantage of for end customers as well as their own needs. They can use ASR to achieve recovery to customer-owned sites, a secondary site they own that can be on dedicated or shared hardware, or to Azure.

Why buy ASR	Solutions available	How to license ASR*	Additional licensing considerations for Microsoft server products
<ul style="list-style-type: none"> • Business Continuity and Disaster Recovery as a Service without up-front capital expenditure with Microsoft Azure • Provides business continuity for Homogeneous (single hypervisor, e.g., Hyper-V only) and/or heterogeneous (multiple hypervisors, e.g., Hyper-V and VMware) environments 	<p>Microsoft Azure Site Recovery the online service—not using Scout (for Homogeneous Hyper-V 2012 environments)</p>	<ul style="list-style-type: none"> • Consumption via... <ul style="list-style-type: none"> • Direct • Open • Existing or New Azure EA/Service Cloud Enrollment (annual minimum monetary commitment) <p>Microsoft ASR Annual Subscription Plan under EA (not consumable against monetary commit)</p>	<ul style="list-style-type: none"> • On-Premises (all products) <ul style="list-style-type: none"> • Fully licensed servers, or • Disaster Recovery benefit for Software Assurance • Service Provider Dedicated HW <ul style="list-style-type: none"> • Service Provider via SPLA, or • End customer licenses (e.g., dedicated outsourcing) • Service Provider Multi-Tenant HW <ul style="list-style-type: none"> • Service Provider licenses via SPLA
<ul style="list-style-type: none"> • Simplify delivery of site-to-site backup services by using Microsoft Azure 	<p>Microsoft Azure Site Recovery—Scout (for physical, heterogeneous, or VMware environments)</p>	<p>Microsoft ASR Annual Subscription Plan under EA (only option to license ASR for Scout usage—not consumable against monetary commitment)</p>	<ul style="list-style-type: none"> • Disaster Recovery on Azure <ul style="list-style-type: none"> • Windows Server is licensed as part of the compute instance <ul style="list-style-type: none"> • The Disaster Recovery Software Assurance benefit applies to Microsoft server products protected with Azure Site Recovery. This change was made in the January 2015 PUR.

Licensing FAQ

Licensing the Azure Site Recovery Service

Licensing ASR for Different Recovery Scenarios

- Q: Why is there a price difference between Site to Azure meter and the Site to Site meter?

A: When recovering to Azure with the S2A Plan SKU, through an Enterprise Agreement, you will also receive 100 GB of Azure Blob storage that is geo redundant (known as geo-redundant storage, or GRS), 1 million storage transactions, 100 GB of bandwidth (egress) per month for each protected instance as well as a guaranteed recovery time objective (RTO). This represents significant value to the buyer as they can remove capital expenditures traditionally incurred when establishing a disaster recovery solution, ASR is priced competitively to reflect this value.
- Q: Under what circumstances would I incur additional expenses for this service?

A: While ASR comes with the allotments mentioned above, in some circumstances, additional fees may apply. Some additional expenditures that may apply are: when you exceed storage, storage transactions, or bandwidth allotments, the infrastructure as a service (IaaS) costs associated with testing the disaster recovery solution, and additional Azure services you may elect to consume such as ExpressRoute. Note that IaaS hours are not included.
- Q: Are the geo-redundant Blob Storage, Storage Transactions, and Bandwidth (egress) included quantities based on each instance protected?

A: No, these entitlements are pooled across protected instances at the Enrollment level. Unused entitlement from smaller instances may be used for instances that are larger.
- Q: Are the geo-redundant Blob Storage, Storage Transaction, and Bandwidth (egress) included quantities available in all channels and offers?

A: No, currently only protected instances licensed through the ASR Plan SKU in EA will receive the included entitlements. Customers may purchase ASR Enterprise to Azure through other programs on a consumption basis but they will be charged separately for geo-redundant Blob Storage, Storage Transactions, and Data Transfers (egress) based on actual usage.
- Q: What happens if my actual usage exceeds the total included entitlement associated with instances protected to Azure?

A: You will be billed for additional usage of geo-redundant Blob Storage, Storage Transactions, and Data Transfers (egress) in the amount exceeding the entitlement.
- Q: What is the ASR Recovery-Time-Objective (RTO) guarantee?

A: Azure Site Recovery includes a guaranteed recovery time objective (RTO) of 4 hours for unencrypted instances and 6 hours for encrypted instances for

instances that are 100 GB or smaller. For each 25 GB increment above 100 GB the RTO guarantee increases by 1 hour. For each protected instance that cannot be started in Azure within the specified RTO the customer may qualify for a service-level agreement (SLA) credit of up to 100 percent of the monthly service charge for each instance not meeting the SLA.

Licensing ASR for Scout Usage

7. Q: How can customers license ASR using Scout software?

A: Scout is part of the ASR Plan offering in an Enterprise Agreement. You would need to pay for the instances you are protecting with Scout through the ASR Plan SKU. You can license ASR to deploy ASR the online service, or Scout an on-premises software, in order to protect your instances. The online service and Scout fundamentally deliver the same general capability to protect and recover server workloads at a secondary site. Although, each option has its own unique capabilities in terms of the types of workloads that can be protected (non-virtualized, virtualized on various versions of Hyper-V 2012, virtualized on VMware, etc.). For additional information on the environments supported by the online service and Scout, please refer to technical documentation at [Support for InMage](#).

8. Q: Will Scout be available as a perpetual license?

A: No. Scout usage is offered on a subscription basis through the Azure Site Recovery service offering.

9. Q: Can a customer have a mixed deployment environment where they are protecting some instances with Scout and others with the ASR online service?

A: Yes.

10. Q: Can Direct or Enterprise Agreement customers pay for Scout disaster recovery usage on a consumption basis by being billed or using their monetary commitment?

A: No. The Azure Site Recovery service currently cannot meter Scout disaster recovery usage.

11. Q: If a customer purchases the Azure Site Recovery Plan SKU on their Enterprise Agreement can they protect two different instances with the same license (one with Scout and a second instance with the ASR online service)?

A: No. For each unit of the ASR Plan subscription license customers may protect a single instance. Customers may choose between deploying Scout or the ASR service as the method of protecting a licensed instance.

12. Q: I have purchased the Azure Site Recovery Plan SKU on my Enterprise Agreement and am using Scout to protect my instances, but in the Azure Enterprise Portal I also see an unused entitlement of ASR. Do I have unused service entitlement that can be used elsewhere?

A: The Azure Site Recovery Enterprise Agreement Plan SKU establishes a service entitlement for ASR in the portal. If you have elected to deploy Scout to protect your licensed instances instead of deploying ASR, then you will see the entitlement in the portal without the corresponding usage reported against it.

13. Q: The number of instances I am protecting with Scout changed after the initial order of the Azure Site Recovery Enterprise Agreement Plan SKU. How do I report my additional usage?
A: The Azure Site Recovery Enterprise Agreement Plan SKU is an annual entitlement offering. If usage *decreases*, no action is necessary. If usage *increases*, you will need to purchase additional quantities of the SKU to license the additional instances being protected at true-up.

Consumption versus Plan Offers

14. Q: What is an Azure Consumption offer?
A: An Azure Consumption offer is a way to pay for Azure services based on actual usage on a monthly basis. Consumption offers are available in Direct, Open, and the Enterprise Agreement. Consumption purchases made through the Enterprise Agreement Consumption decrement the customer's annual Monetary Commitment dollars and the customer is invoiced if their Monetary Commitment dollars are exhausted.
15. Q: What is an Azure Plan offer?
A: An Azure Plan offer allows customers to purchase a specific quantity of a specific service for a discrete period of time (typically a year). Not all Azure services are available as Azure Plan offers. Azure Plan purchases are tracked in the Azure Enterprise Portal where customers can see how their actual usage compares to the quantity of the service they purchased. If actual usage exceeds the quantity of the service purchased via Plans, the customer is billed via Consumption offers. Azure Plans are transacted on dedicated SKUs that appear on the Price List. Azure Plan SKUs must be paid for directly and cannot be paid for out of Monetary Commitment.
16. Q: What are the key differences between Azure Consumption and Plan offers?
A: The service being purchased is exactly the same between the two offer types. The offer types are simply different ways to purchase the service. *Consumption* offers are available in all channels in which Azure is sold (Direct, Open, and EA). In EA Consumption, offers are paid for out of Monetary Commitment. *Plan* offers, in contrast, are currently only available via EA and must be purchased directly via Plan SKUs, which cannot be paid for out of Monetary Commitment. For ASR, Plan offers are the only way for customers to self-report Scout usage which is not currently metered through the ASR service; once metering is implemented Scout usage will be available via ASR Consumption offers.
17. Q: Through which licensing program should Service Providers purchase ASR?
A: Azure services are not available for purchase through the SPLA program. You can purchase ASR through an Enterprise Agreement by taking advantage of the Managed Service Exception and/or Hoster Exception.
18. Q: If I must use a planned SKU, such as in the case of Scout, what should I do?
A: As the hosting exemption and managed services exemption for Microsoft Azure Services are not programmatically available for planned SKUs, you should consult your Microsoft Account Representative for more information.

Licensing Protected Server Workloads for Disaster Recovery

Licensing Microsoft Server Products for Disaster Recovery Failovers at a *Customer's Site*

19. Q: How should I license Windows Server when my customers are running recovered instances at their secondary site, or I am recovering my own instances to a secondary site that I own?
A: The servers need to be fully licensed with Windows Server licenses. If the customer has active Software Assurance coverage on their Windows Server at the primary site they may deploy Windows Server at the secondary site through the Disaster Recovery Software Assurance benefit for non-production disaster recovery purposes only. Consult the PUR to determine if customer usage meets the Disaster Recovery Software Assurance benefit criteria.
20. Q: How should customers license Microsoft server products other than Windows Server (SQL, SharePoint, Exchange, etc.) when they are running at their secondary site?
A: These servers can be licensed with separate licenses at the secondary site or through the Disaster Recovery Software Assurance benefit—if the customer qualifies for this benefit.

Licensing Microsoft Server Products for Disaster Recovery Failovers at a *Service Provider Site*

21. Q: How should I license Windows Server when I am running recovered instances of my End Customer workloads on shared hardware?
A: Windows Server should be licensed via your SPLA agreement.
22. Q: How should I license Windows Server when I am running recovered instances of their End Customer workloads on dedicated hardware?
A: Windows Server can be licensed via your SPLA agreement or via the End Customer's license if they qualify for the Disaster Recovery Software Assurance benefit.
23. Q: How should I license Microsoft server products, other than Windows Server (SQL, SharePoint, Exchange, etc.), when I am running recovered instances of their End Customer workloads on shared hardware?
A: These server products should be licensed via your SPLA agreement on the basis in which the servers are normally licensed in SPLA (Per Core, Per User, etc.).
24. Q: How should I license Microsoft server products, other than Windows Server (SQL, SharePoint, Exchange, etc.), when I am running recovered instances of my End Customer workloads on dedicated hardware?
A: These servers can be licensed via your SPLA agreement or via the End Customer's license if they qualify for the Disaster Recovery Software Assurance benefit.

Licensing Microsoft Server Products for Disaster Recovery Failovers on Azure

25. Q: How should Windows Server be licensed when recovering on Azure?

A: Windows Server-based protected instances are recovered in Windows Server compute instances on Azure, which inherently include the right to run Windows Server. You will pay separately for Azure compute during failovers.

26. Q: How should Microsoft server products, other than Windows Server (SQL, SharePoint, Exchange, etc.), be licensed when recovering on Azure?

A: The Disaster Recovery Software Assurance benefit applies to Microsoft server products protected with Azure Site Recovery. This change was made in the January 2015 PUR.

27. Q: Can a customer use their License Mobility or Disaster Recovery Software Assurance benefits to license Microsoft server products other than Windows Server when recovering on Azure?

A: No, each of these Software Assurance benefits has important limitations that make them inappropriate for licensing recovery to Azure. The License Mobility benefit requires customers to reassign their licenses to Azure for a minimum of 90 days, which does not align to a temporary production recovery on Azure. In addition, License Mobility only provides for one running instance at a time, which does not provide for test recoveries where the production instance continues to run on premises while the test recovery instance runs on Azure. The Disaster Recovery benefit does cover both production and test recovery scenarios, but is not eligible for instances run on shared (multi-tenant) hardware.

General Licensing Microsoft Server Products for Disaster Recovery

28. Q: Are there any restrictions to the length of time a server software instance can be running at the secondary site when using the Disaster Recovery Software Assurance benefit?

A: Yes, test recoveries are limited to brief periods of disaster recovery testing within one week every 90 days.

Resources

- [Azure Site Recovery Pricing](#)
- [Azure Site Recovery Service Features](#)