

Microsoft Azure Service Fabric 6.4 Fourth Refresh Release Notes

This release includes the bug fixes and features described in this document. This release includes runtime, SDKs and Windows Server Standalone deployments to run on-premises.

The following packages and versions are part of this release

Service Fabric Runtime	Ubuntu	<i>6.4.639.1</i>
	Windows	<i>6.4.644.9590</i>
	Red Hat Enterprise	<i>6.1.189.1</i>
Service Fabric for Windows Server	Service Fabric Standalone Installer Package	<i>6.4.644.9590</i>
.NET SDK	Windows .NET SDK	<i>3.3.644</i>
	Microsoft.ServiceFabric	<i>6.4.644</i>
	Reliable Services and Reliable Actors	<i>3.3.644</i>
	ASP.NET Core Service Fabric integration	<i>3.3.644</i>
Java SDK	Java for Linux SDK	<i>1.0.3</i>

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Service Fabric Runtime

Versions

- **Ubuntu** 6.4.639.1
- **Red Hat** 6.1.189.1
- **Windows** 6.4.644.9590

Service Fabric common bug fixes

- The problem occurs when the primary replica of the Failover Manager system service happens to move while the node is closing. In such cases, the closing node is unable to detect the move and hence unable to communicate with the Failover Manager service. This can result in delays in reconfigurations for partitions whose replicas are on the node.
 - The fix is to modify the node closing logic in Service Fabric such that it can track movements of the Failover Manager primary replica and can continue to communicate with it even when the node is closing.
- Fixing the hostname computation so that cluster setup works with hostname names greater than 15.
 - The Dev cluster setup (mesh/non mesh both) on windows client machines fails to come up when the hostname of the machine is greater than 15 characters long. In this case the netbios name which is generated and used for the gateway endpoints differs from the original hostname name and then the transport keeps on throwing exceptions.
- Remoting Calls were stuck in case of communication failures. We maintain a cache of communication client. Till the time, we don't clean these entries, new clients are not created for the same endpoint. All the calls for that endpoints get retried till the new entries get created.
 - Fix: To make cleanup client cache code efficient to clean the invalid entries as soon as possible.
- [#1056](#): Fixed by specifying user keys when generating the self-signed certificate so access to machine key store is not required.
- Recently rssh upgrade from Ubuntu caused regression in our SF clusters. Below link has more details. <https://blogs.msdn.microsoft.com/azureservicefabric/2019/02/07/known-issue-for-service-fabric-linux-clusters/>. We are still waiting for Ubuntu to provide a patch for the regression.

- In the meantime, to work around the regression caused by rssh package, we are trying to fix libssh2 client package to send proper command request to rssh. We will be statically linking the patched libssh2 to our services, so that it works well with latest rssh package.

Service Fabric .NET SDK Bug Fixes

Versions

Windows .NET SDK 3.3.644

- Bug: Remoting V2 stack calls stuck but service failover has not occurred recently.
 - Fix: This was happening as we were setting client entries before client open call succeeds. We should not be setting the invalid client entries in the cache.

Service Fabric Java SDK

Versions

- Java Reliable Services 1.0.3

Java Reliable Services Bug Fixes

- Native Resolved Service Partition was leaking when a Service/Actor Proxy object was created. The resident memory could grow to a point where the Java process could crash with OOM error, if significantly large number of service/actor proxies are created.
 - Implemented a pattern to release native RSP, if the Service/Actor proxy are no longer needed.

Repositories and Download Links

The table below is an overview of the direct links to the packages associated with this release.

Follow this guidance for setting up your developer environment:

- Linux: <https://docs.microsoft.com/en-us/azure/service-fabric/service-fabric-get-started-linux>
- Mac: <https://docs.microsoft.com/en-us/azure/service-fabric/service-fabric-get-started-mac>
- Windows: <https://docs.microsoft.com/en-us/azure/service-fabric/service-fabric-get-started>

Area	Package	Version	Repository	Direct Download Link
Service Fabric Runtime	Ubuntu Developer Set-up	6.4.639.1	N/A	Cluster Runtime: https://apt-mo.trafficmanager.net/repos/servicefabric/pool/main/s/servicefabric Service Fabric SDK for local cluster setup: https://apt-mo.trafficmanager.net/repos/servicefabric/pool/main/s/servicefabric/sdkcommunication/ Container image: https://hub.docker.com/r/microsoft/service-fabric-onebox/

Area	Package	Version	Repository	Direct Download Link
	Red Hat Developer Set-up	6.1.189.1	N/A	Cluster Runtime: https://packages.microsoft.com/yumrepos/microsoft-rhel7.4-prod/ Service Fabric SDK for local cluster setup: https://packages.microsoft.com/yumrepos/microsoft-rhel7.4-prod/servicefabric_sdkcommon_1.1.2.rpm
	Windows Developer Set-up	6.4.644.9590	N/A	https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftServiceFabric.6.4.644.9590.exe
Service Fabric for Windows Server	Service Fabric Standalone Installer Package	6.4.644.9590	N/A	https://download.microsoft.com/download/8/3/6/836E3E99-A300-4714-8278-96BC3E8B5528/6.4.644.9590/Microsoft.Azure.ServiceFabric.WindowsServer.6.4.644.9590.zip
	Service Fabric Standalone Runtime	6.4.644.9590	N/A	https://download.microsoft.com/download/B/0/B/B0BCCAC5-65AA-4BE3-AB13-D5FF5890F4B5/6.4.644.9590/MicrosoftAzureServiceFabric.6.4.644.9590.cab
.NET SDK	Windows .NET SDK	3.3.644	N/A	https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftServiceFabricSDK.3.3.644.msi

Area	Package	Version	Repository	Direct Download Link
	Microsoft.ServiceFabric	6.4.644	N/A	https://www.nuget.org
	Reliable Services and Reliable Actors <ul style="list-style-type: none"> • Microsoft.ServiceFabric.Services • Microsoft.ServiceFabric.Services.Remoting • Microsoft.ServiceFabric.Services.Wcf • Microsoft.ServiceFabric.Actors • Microsoft.ServiceFabric.Actors.Wcf 	3.3.644	https://github.com/Azure/service-fabric-services-and-actors-dotnet	https://www.nuget.org
	ASP.NET Core Service Fabric integration <ul style="list-style-type: none"> • Microsoft.ServiceFabric.Services.AspNetCore.* 	3.3.644	https://github.com/Azure/service-fabric-aspnetcore	https://www.nuget.org
	Data, Diagnostics and Fabric transport <ul style="list-style-type: none"> • Microsoft.ServiceFabric.Data • Microsoft.ServiceFabric.Data.Interfaces • Microsoft.ServiceFabric.Diagnostics.Internal • Microsoft.ServiceFabric.FabricTransport.Internal 	3.3.644	N/A	https://www.nuget.org
	Microsoft.ServiceFabric.Data.Extensions	1.4.644	N/A	https://www.nuget.org

Area	Package	Version	Repository	Direct Download Link
Java SDK	Java SDK	1.0.2	N/A	https://mvnrepository.com/artifact/com.microsoft.servicefabric/sf-actors/1.0.2
Visual Studio	Visual Studio 2017 Tools for Service Fabric	2.4.11024.1	N/A	Included in Visual Studio 2017 Update 7 (15.7) and above
	Visual Studio 2015 Tools for Service Fabric	2.4.11116.1	N/A	See localized download links below
Eclipse	Service Fabric plug-in for Eclipse	2.0.7	N/A	N/A
Yeoman	Azure Service Fabric Java generator	1.0.7	https://github.com/Azure/generator-azuresfjava	N/A
	Azure Service Fabric C# generator	1.0.9	https://github.com/Azure/generator-azuresfcsharp	N/A
	Azure Service Fabric guest executables generator	1.0.1	https://github.com/Azure/generator-azuresfguest	N/A
	Azure Service Fabric Container generators	1.0.1	https://github.com/Azure/generator-azuresfcontainer	N/A
CLI	Service Fabric CLI	7.1.0	https://github.com/Azure/service-fabric-cli	https://pypi.python.org/pypi/sfctl
PowerShell	AzureRM.ServiceFabric	0.3.15	https://github.com/Azure/azure-powershell/tree/preview/src/ResourceManager/ServiceFabric	https://www.powershellgallery.com/packages/AzureRM.ServiceFabric/0.3.15

Visual Studio 2015 Tool for Service Fabric – localized download links

NOTE: The below download links are for the 2.4.11116.1 release of Visual Studio 2015 Tools for Service Fabric.

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.de-de.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.en-us.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.es-es.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.fr-fr.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.it-it.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.ja-jp.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.ko-kr.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.ru-ru.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.zh-cn.msi>

<https://download.microsoft.com/download/D/8/3/D834F3B5-ECAA-413D-AFEA-8C57E8510164/MicrosoftAzureServiceFabricTools.VS140.zh-tw.msi>