Windows Service Status Monitoring using Appdynamics .Net Extension Manager

1. Download Extension Manager -

https://www.appdynamics.com/community/exchange/extension/appdynamics-net-agent-extension-manager/

2. Unzip appdynamics-extensionmanager.zip under C:\ProgramData\AppDynamics

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3. Run "AppDynamics.Extension.Manager.exe" as Administrator

appoynamics ex	tension Servi	ice for DotNet Agen	nt	
lot Installed			Install	Refresh
ist of extension:	loaded			
Extension Type:	EVENT	Extension Name:	WindowsEventLogMonitor	Enabled: False
Execution Type:	DLL	Execution Mode:	CONTINUOUS	Manage
This extension wat controller as custo	ches for the W m events.	lindows Events configu	ared below, and sends them to	
Extension Type:	METRIC	Extension Name	: ScriptMonitor	Enabled: False
Execution Type:	SCRIPT	Execution Mode	PERIODIC	Manage
The Extension Serv and store the metr	ice will call the ic values as W tric name, inst	configured script even indows Performance C ance name and value.	ry minute, read the output ounters. Each line of output	
should contain me				
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4. Click on Install

AppDynamics Exten	sion Manage	er				-	x
AppDynamics Exte	ension Serv	rice for DotNet Agen	it				
Stopped		Star	t	UnInsta		Refresh	
List of extensions	loaded						
Extension Type:	EVENT	Extension Name:	WindowsEv	ventLogMonito	r	Enabled: False	
Execution Type: This extension watch controller as custom	DLL hes for ti n events. Ap	Operation comp	leted succe	ssfully.	to	Manage	
Extension Type:	METE ins	talled successfully.			_	Enabled: False	ш
The Extension Servic and store the metric should contain metri	ce will ca c values a ric name, ins	Cleance name and value.	ose			Manage	
Extension Type:	EVENT	Extension Name:	Windows	RebootMonito	r	Enabled: False	jU
Execution Type:	DLL	Execution Mode:	CONTINU	IOUS		Manage	
This extension repo	rts last winde	ows restart time and rea	ison.]
•		Configure Wind	dows Perfor	mance Counter	rs	Restart Coordina	tor

5. Click on Start

AppDynamics Exten	sion Manager					x
AppDynamics Exte	ension Servic	e for DotNet Ager	nt			
Running		Stop	p	UnInstall	Refresh	
List of extensions	oaded					
Extension Type:	EVENT	Extension Name:	WindowsE	ventLogMonitor	Enabled: False	*
Execution Type: This extension watch controller as custom	DLL nes for ti events.	Operation comp	leted succe	ssfully. to	Manage	
Extension Type:	METF starte	ed successfully.			Enabled: False	
Execution Type:	SCRI				Manage	
The Extension Servic and store the metric should contain metr	e will ca values a ic name, insta	Cl nce name and value.	ose			
Extension Type:	EVENT	Extension Name:	Windows	RebootMonitor	Enabled: False	
Execution Type:	DLL	Execution Mode:	CONTINU	JOUS	Manage	
This extension repor	ts last window	vs restart time and rea	ason.			÷
		Configure Wind	dows Perfor	mance Counters	Restart Coordinat	or

6. Edit extension.xml file - C:\ProgramData\AppDynamics\AppDynamics ExtensionManager\Extensions\WindowsServiceStatusMonitor\extension.xml

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Edian	
Hetric Extensions The "name" proper	create custom Windows Performance Counters to store metric data until it's sent to the Controller via the AppDynamics.Apent.Coordinator service. ty specified below is used to name this Extension, as well as the Performance Counter category these metrics will be added to.
Extension type="Hetr	ic" name="WindowsServiceStatusMonitor" enabled="false">
<pre><description>This e</description></pre>	riodio" type="DLL" frequency-in-seconds"=60" path="WindowsServiceStatumMonitor" /> MindowsServiceStatumMonitor" /> MindowsServiceStatumMonitors and MindowsServiceStatumMonitors //SecondstatumMonitors
E </td <td></td>	
As noted above, a Performance Count specified by the 1	11 "Metric" Extension metrics are stored as custom Windows Performance Counters on the server. ers will be named after the metric name and instance names below, and stored in the "WindowsServiceStatusMonitor" Performance Counter Category as Extension name.
Be sure to add th https://docs.appd You can also use ;	ese Performance Counters to the AppDynamics.Agent.Coordinator configuration file (config.xml) so that they're reported to the controller. Inmamics.com/display/FRO41/Enable=Monitoring=for=Windows=Performance=Counters. AppDynamics.Extension.CCT.exe included in your Extensions install folder to add these Performance Counters to your config.xml
The following met	ric, serviceStatus, will report the Windows service status as an integer value.
E (metrica)	
CRETTIC Danes"Ser	viceStatus" enabled="true" description="Status of windows service" />
E </td <td></td>	
Instance name rep	resents the name of the Windows service to be monitored.
>	
(instances)	
<pre><instance b<="" name="A <instance name=" pre=""></instance></pre>	ppDynamics.Agent.Coordinator_service" enabled="true" /> CacheSvo" enabled="true" />
<pre></pre>	

7. Change following sections

Enabled = true in the extension xml tag.

START LETATOR TO ANOTHER ALL A	
Metric Extensions create custom Windows Performance Counters to store metric data until it's sent to the Controller via the AppDynamics.Apent.Coordinator The "name" property specified below is used to name this Extension, as well as the Performance Counter category these metrics will be added to.	service.
L	
<pre>Gettension type="Metric" name="WindowsServiceStatusMonitor" enabled="true"></pre>	
<pre>Cexecution mode="Periodic" type="DLL" frequency-in-seconds="60" path="WindowsServiceStatusHonitor" /></pre>	
<pre><description>This extension can be used to monitor the status of any Windows service on the machine.</description></pre>	
As noted above, all "Metric" Extension metrics are stored as custom Windows Performance Counters on the server.	
Performance Counters will be named after the metric name and instance names below, and stored in the "WindowsServiceStatusMonitor" Performance Counter Co specified by the Extension name.	tegory as
Be sure to add these Performance Counters to the AppDynamics.Apent.Coordinator configuration file (config.xml) so that they're reported to the controller https://docs.appdynamics.com/display/FRO41/Enable+Konitoring=for+Windows=Performance=Counters.	-
You can also use AppDynamics.Extension.CCT.exe included in your Extensions install folder to add these Performance Counters to your config.xml	
The following metric, serviceStatus, will report the Windows service status as an integer value.	
CREELO name" ServiceStatus" enabled "true" description "Status of Windows Service" />	
(metrics)	
Instance name represents the name of the Windows service to be monitored.	
>	
Cinstances>	
<instance enabled="true" name="AppDynamics.Apent.Coordinator_service"></instance>	
<pre><instance enabled**true"="" name**wcachesyc"=""></instance></pre>	
-	
L	

8. Add instance tag for all the windows services you want to monitor -

e.g.: You want to monitor DHCP Client service and DNS Client services.

a.) Get the service name from services.msc

DHCP Client Service Name: Dhcp

DNS Client Service Name : Dnscache

Action new Hep		
Services (Local) Services (Local)		
DHCP Client	Name	Description Status Startup Type Log On Ac
Stop the service Restart the service Description	Application Information Application Layer Gateway Service Application Management ASP.NET State Service Background Intelligent Transfer Service	Facilitates t Started Manual Local Syst Provides su Manual Local Sen Processes in Started Manual Local Syst Provides su Disabled Network S
and DNS records for this computer. If this service is stopped, this computer will not receive dynamic IP addresses and DNS updates. If this service is disabled, any services that explicitly depend on it will fail to start.	Bittocker Dive Encryption Service Bittocker Dive Encryption Service Bitocker Bitackup Engine Service Bitacker Bitackup Engine Service Bitacker Bitackup Engine Service Bitacker Bitackup Engine Service Centrologia Service Child Key Isolation Computer Browser Debug Diagnostic Service Debug Diagnostic Service Diagnostic Sonice Host Diagnostic System Host Diagnostic Streme Host Diagnostic Streme Host Distributed Link Tracking Clemt Distributed Transaction Coordinator	General Leg On Recovery Dependencies Service name: Dhop Deplay name: DhOp Dent Description: Peorida for this computer. If this service is stopped. Path to executable: C:\Windows!aystem32?avchost.exe -k. LocalServiceNetworkRestrice Statup type: Automatic Help me.confloure service status cotions. Service status: Started Start Stop Pause Resum You can specify the start parameters that apply when you start the service Start parameters Cell Cancel A

b.) Add following two entries under instances and save the file.

<instance name=" Dhcp" enabled="true" />

<instance name=" Dnscache" enabled="true" />

<pre>class version="1.0" encoding="utf-8"]></pre>
Netric Extensions create custom Windows Performance Counters to store metric data until it's sent to the Controller via the AppDynamics.Agent.Coordinator service. The "name" property specified below is used to name this Extension, as well as the Performance Counter category these metrics will be added to.
<pre>cerection node="periodic type="DLL" frequency-in-second="60" pith="findowsServiceStatusMonitor" /></pre>
As noted above, all "Metric" Extension metrics are stored as custom Windows Ferformance Counters on the server. Ferformance Counters will be named after the metric name and instance names below, and stored in the "WindowsServiceStatusMonitor" Ferformance Counter Category as specified by the Extension name.
Be sure to add these Performance Counters to the AppDynamics.Apent.Coordinator configuration file (config.sml) so that they're reported to the controller. https://docs.acddynamics.com/disclav/FROM/Thable-Monitoring-formAnce-Counters. You can also use AppDynamics.Extension.CCT.exe included in your Extensions install folder to add these Performance Counters to your config.sml
The following metric, serviceStatus, will report the Windows service status as an integer value.
Antica several family and taken and taken and taken and the several and the several of the several of the several s
Antitic rate servicestatus energes the description status of visions service //
tion
instance name represents the name of the windows service to be monitored.
<pre>cinstance name="AppDynamics.Agent.Coordinator_service" enabled="true" /> <instance enabled="true" name="MCscheSvo"></instance></pre>
<pre><instance enabled="Frue" name=" Dhop"></instance></pre>
<pre><instance duscache*="" enabled*'true*="" name**=""></instance></pre>
<pre></pre>
<pre>\closed compared compared</pre>

9. Restart following two services from services.msc

- AppDynamics.Agent.Extension_Service
- AppDynamics.Agent.Coordinator_service

10. In the config.xml file located at C:\ProgramData\AppDynamics\Config, the perfmon counters should be added as mentioned below.

<machine-agent>

<perf-counters>

cperf-counter cat="WindowsServiceStatusMonitor" name="ServiceStatus" instance="AppDynamics.Agent.Coordinator_service" />

<prerf-counter cat="WindowsServiceStatusMonitor" name="ServiceStatus" instance="EventSystem" />

cperf-counter cat="WindowsServiceStatusMonitor" name="ServiceStatus" instance="Bluetooth Device Monitor" />

<perf-counter cat="WindowsServiceStatusMonitor" name="ServiceStatus" instance="gpsvc" />

<perf-counter cat="WindowsServiceStatusMonitor" name="ServiceStatus" instance=" Dhcp" />

<perf-counter cat="WindowsServiceStatusMonitor" name="ServiceStatus" instance=" Dnscache" />

</perf-counters>

</machine-agent>

11. After the above steps, the custom metrics would appear in the Metric Browser at the following location (Application Infrastructure Performance|<tier name>|Custom Metrics|Performance Monitor|WindowsServiceStatusMonitor)

			26 Day(s) 5	eft en Pleip Trie	e - Opgrade	Now >							
etric Browser - Venu													
Hide Metric Tree	ot Points 🖌	Compare Aga	inst Baseline	Export	Data •				00	C Refresh	O la	st 15 minute	8
Metric Tr Settings										~	4+0308		
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ALL ADD INCT													
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 A) Seminal Services 													
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the Exercitation													
a start	5102.994		PH 5-05 PH	3 06 PH			3,09 PH	5-30 PM			5114 PH		5-16

Different Service status and details -

- 1 : SERVICE_STOPPED
- 2 : SERVICE_START_PENDING
- 3 : SERVICE_STOP_PENDING
- 4 : SERVICE_RUNNING
- 5 : CONTINUE_PENDING
- 6 : PAUSE_PENDING
- 7 : SERVICE_PAUSED

So 1 means stopped and 4 means running.

Refer dwCurrentState section on https://msdn.microsoft.com/en-us/library/windows/desktop/ms685996(v=vs.85).aspx for more details