



DYNATRACE PLATFORM USAGE SUPPLEMENT

Effective Date: November 15, 2022

This Platform Usage Supplement describes the usage metrics and other aspects of specific elements of the Dynatrace offerings (including products, subscriptions or support) listed below, whether acquired directly from Dynatrace or from an authorized Dynatrace resale partner, and is part of any Order Form or renewal entered into on or after the Effective Date.

THE DYNATRACE® SOFTWARE INTELLIGENCE PLATFORM

The Dynatrace Software Intelligence Platform is a full stack, all-in-one platform which includes Application Performance Management (APM), Infrastructure Monitoring, AIOps, Digital Experience Monitoring (DEM), Digital Business Analytics, Application Security and Cloud Automation. The elements of the Dynatrace platform are generally licensed on a consumption-based model, up to the amount and for the time period specified in the Order Form. The descriptions below apply to both SaaS and Managed deployments unless otherwise stated.

FLEXIBLE, CONSUMPTION-BASED LICENSES

Dynatrace provides flexibility in many licensable components, enabling customers to effectively deploy and consume in dynamic environments. Dynatrace Digital Experience Monitoring (DEM) Units, Davis Data Units (DDUs), Cloud Automation Units (CAUs), and Application Security Units (ASUs) enable a Customer to use any of the eligible capability types shown in the respective Unit Weighting Tables (as updated from time to time) on a fully flexible basis up to the unit Quantity and Type shown on the Order Form. Each deployed and executed instance of a Capability Type consumes the indicated unit weight. Dynatrace may introduce additional or upgraded capabilities from time to time. The Customer may enable the usage of these capabilities, which will consume the existing pool of licensed DEM Units, DDUs, CAUs or ASUs in accordance with the applicable weighting table. Likewise, customers can purchase Host Unit Hours for application and infrastructure monitoring for use cases like project-based monitoring and variable workload demand.

When DEM Units, DDUs, Host Unit Hours, CAUs, or ASUs are purchased as an annual usage amount for a multi-year term, the usage resets each year on the anniversary of the Start Date and Customer is entitled to use the Product again for the purchased number of annual units during the next year. If 100% of the purchased annual units are consumed before the year ends, additional units can be purchased. The additional purchased units will automatically reset or terminate on the same date as the initial purchased units. Any unused annual usage amount expires at the anniversary date and is not carried forward into the following year.

APPLICATION AND INFRASTRUCTURE MONITORING

Dynatrace application and infrastructure monitoring is provided via installation of a single Dynatrace OneAgent® on each monitored host in Customer's environment. OneAgent can operate in two different modes. Full-stack Monitoring mode provides complete application performance monitoring, code-level visibility, deep process monitoring, and infrastructure monitoring (including PaaS platforms). Infrastructure Monitoring mode provides physical and virtual infrastructure-centric monitoring and consumes fewer host units than full-stack mode.

Each instance of a Dynatrace OneAgent installed and running on an operating system instance (deployed on either a physical or virtual machine) with Full-stack Monitoring mode or Infrastructure Monitoring mode enabled (Smartscape® Levels - Data center, Host, Process, Service) will consume Host Units or Host Unit Hours based on the applicable column in the Unit Weighting table below.

Dynatrace Application and Infrastructure Monitoring Unit Weighting Table			
Instance Size	Maximum RAM Memory Available To Operating System Where OneAgent is Installed	Full-stack Monitoring - Host Unit or Host Unit Hours Equivalent	Infrastructure Monitoring - Host Units or Host Unit Hours Equivalent
Micro	1.6 GB	0.1	0.03
Extra Small	4 GB	0.25	0.075
Small	8 GB	0.5	0.15
Regular	16 GB	1	0.3
x 2	32 GB	2	0.6
x 3	48 GB	3	0.9

x 4	64 GB	4	1
x 5	80 GB	5	1
x 6	96 GB	6	1
x 7	112 GB	7	1
x N	N x 16	N	1

Mainframe Monitoring on IBM z/OS

OneAgent® code modules running on IBM z/OS (CICS, IMS, and Java) are based on Million Service Units (MSUs) and don't contribute to the consumption of Host Units or Host Unit Hours.

The licensed MSUs are calculated based on peak rolling 4-hour average MSU values of the most recent month from IBM System Management Facility (SMF) data per monitored Logical Partitions (LPARs) or products.

The peak rolling 4-hour average MSU values can be derived from Dynatrace® (per monitored LPAR) or from section P5 of SCRT report.

Customer agrees to promptly notify Dynatrace if the peak rolling 4-hour average MSU values of their monitored LPARs or products exceed the licensed MSUs.

Customer agrees not to disable the reporting of information about monitored technologies, or if disabled, to provide Dynatrace with the peak rolling 4-hour average MSU values of their monitored LPARs or products every 6 months from date of execution.

DIGITAL EXPERIENCE MONITORING

Dynatrace Synthetic Monitoring, Real User Monitoring, and Session Replay capabilities are consumed based on Digital Experience Monitoring units, otherwise known as DEM Units. DEM Units may be consumed as shown in the Unit Weighting Table below.

Dynatrace Digital Experience Monitoring (DEM) Unit Weighting Table		
DEM Unit Capability Type (Products)	Unit of Measure	DEM Unit Weight
Real User Monitoring Session	- Per Session	0.25
Real User Monitoring Session captured with Session Replay	- Per Session	1.00
Additional Defined Properties for Real User Monitoring Session	- Per property per Session	0.01
Synthetic Monitoring (Browser or Clickpath Monitor)	- Per Synthetic Action	1.00
Synthetic Monitoring (HTTP Monitor)	- Per Synthetic Request	0.10
Synthetic Monitoring (Third-Party Synthetic API)	- Per Third-Party Synthetic Result	0.10

Real User Monitoring

One Real User Monitoring Session is defined as a sequence of interactions between a visitor (user) with a browser-based application (web application) or a native (iOS, Android) mobile application (app) within an interval and with at least two user actions. A user action is a user input button click or app start which triggers a web request, for example a page load or a view (page) navigation. Interactions with only one user action are considered “bounced” and are not counted as a Session. A user who interacts with more than one web application or app at the same time, consumes one Session for each web application or app, except when the interaction is considered “bounced”. Interactions with hybrid mobile apps, that for technical reasons include both a web application and a mobile app, will only be considered as a single Session. A Session ends when a) the browser running a web application is closed or has been inactive for more than 30 minutes, b) the app is closed by the user or due to a crash, or the client has been inactive for more than 30 minutes, or c) after 60 minutes of continuous interaction with the web

application or app. When Session Replay is enabled, usage is measured based on the Real User Monitoring Sessions captured with Session Replay at the DEM Unit Weight shown in the table above.

A Session or user action can be enriched with additional information by configuring Additional Defined Properties. We currently offer a free tier of 20 Defined Properties. As shown in the table, the DEM Unit cost per Session increases by 0.01 DEM Units for each Additional Defined Property. String properties will be counted based on their length. One Additional Defined Property is counted per 100 characters. For example, 100 Sessions with 25 Defined Properties would consume: $100 * (25 - 20) * 0.01 = 5$ DEM Units for the Additional Defined Properties. The total DEM Unit cost would be 30 DEM Units.

Synthetic Monitoring

A Browser Monitor or Browser Clickpath Monitor Synthetic Action is an interaction with the synthetic browser that triggers a web request, including a page load, navigation event or action that triggers an XHR request. Browser Monitors have a single synthetic interaction (e.g. performance and availability of a single URL) and consume one Synthetic action. Browser Clickpaths are a sequence of pre-recorded Synthetic Actions. Browser Clickpaths consume one Synthetic Action for every interaction that triggers a web request. Scroll downs, keystrokes, or clicks that do not trigger a web request are not counted as an Action. For example, a recorded Clickpath that navigates through two pages, and clicks one button which triggers an XHR request consumes three Synthetic Actions. For example, if this synthetic monitor runs every 15 minutes from two locations for one day it would consume: $3 * (60/15) * 2 * 24 = 576$ Synthetic Actions for that day.

An HTTP Monitor Synthetic Request uses simple http(s) requests to monitor availability, responsiveness, and functional health of a URL-based endpoint.

One Third-Party Synthetic Result is defined as ingesting one synthetic datapoint consisting of availability and duration via the Third-Party Synthetic REST API into Dynatrace. This can happen by directly calling the API endpoint or indirectly for example via an ActiveGate plugin calling the API endpoint. For example, sending results (availability & duration) for 2 locations and 3 steps would count as 6 third-party Synthetic Results.

EXTENDING DYNATRACE DATA COLLECTION AND ANALYTICS

Each Dynatrace supported technology offers multiple “built-in” metrics. Built-in metrics are automatically detected and monitored for Customer. Dynatrace Davis Data Units,)“DDUs”, extend the value of Dynatrace’s built-in monitoring capabilities by enabling customers to integrate with third-party data sources, calculate custom metrics, and other use cases.

Custom metrics, Log Monitoring, Custom Traces, Custom Events, Serverless Functions, Log Management and Analytics, and Business Events capabilities are consumed based on DDU. DDUs may be consumed as shown in the Unit Weighting Table below.

Dynatrace Davis Data Unit (DDU) Weighting Table		
Davis Data Unit Capability Type	Unit of Measure	DDU Weight
Custom metrics	- Per metric data point	0.001
Log Monitoring	- Per log event	0.0005
Custom Traces	- Per span	0.0007
Custom Events	- Per custom event	0.001
Serverless Functions	- Per invocation	0.002
Log Management and Analytics		
Ingest & Process	- Per gigabyte	100.00
Retain	- Per gigabyte per day	0.30

Query	- Per gigabyte	1.70
Business Events		
Ingest & Process	- Per gigabyte	100.00
Retain	- Per gigabyte per day	0.30
Query	- Per gigabyte	1.70

Custom metrics

A “metric data point” is a single value that is stored with a time stamp in Dynatrace. A timeseries “metric” is a series of such data points, for example CPU utilization for all hosts across an analysis timeframe. A metric can have additional dimensions, for example, the name of a network interface or the name of a disk. Such dimensions effectively result in multiple timeseries, one for each entity (for example, Host, Application, etc.) and dimension (for example, Disk, Geolocation, etc.).

The following formula is applied to calculate the DDU consumption for a custom metric ingested once per minute:
 $1 \text{ metric data point} \times 60 \text{ min} \times 24 \text{ h} \times 365 \text{ days} \times 0.001 \text{ metric weight} = 525.6 \text{ DDUs per metric/year}$

For example, ingesting a throughput metric for a network device once every minute = one metric data point; ingesting a throughput metric from 100 network devices that each have two CPUs once every second = 2 CPUs x 100 Devices = 200 metric data points. Considering the metric weight table from above, this would result in the consumption of 200 metric data points x 0.001 = .2 DDUs.

The types of custom metrics include, but are not limited to, built-in extensions, custom extensions, custom remote extensions, Java Management Extension (JMX) & Performance Monitoring Infrastructure (PMI) and Dynatrace® API ingested.

Every OneAgent®-monitored host with Full-Stack Monitoring enabled includes custom metrics per the table below. OneAgent-monitored hosts with Infrastructure Monitoring enabled always include 200 custom metrics that do not consume DDUs. If more than the included custom metrics are reported in a given minute for a OneAgent-monitored host, the custom metrics in excess of the included custom metrics will consume DDUs.

Instance Size	Maximum RAM Memory	Full-stack Monitoring		Infrastructure Monitoring	
		Host Units	Included custom metrics	Host Units	Included custom metrics
Micro	1.6 GB	0.1	200	0.03	200
Extra Small	4 GB	0.25	250	0.075	200
Small	8 GB	0.5	500	0.15	200
Regular	16 GB	1	1,000	0.3	200
x 2	32 GB	2	2,000	0.6	200
x 3	48 GB	3	3,000	0.9	200
x 4	64 GB	4	4,000	1	200
x 5	80 GB	5	5,000	1	200
x 6	96 GB	6	6,000	1	200
x 7	112 GB	7	7,000	1	200
x N	N x 16 GB	N	N x 1,000	1	200

Log Monitoring

Log Monitoring is consumed on the basis of ingestion of log events. 1 GB of ingested data equals 1 million log events, assuming that the average log event size is 1kb (log event = log line or log message). In other words, if the amount of ingested GB and average log size are known, a conversion can be achieved.

To calculate DDU consumption for Log Monitoring, multiply the total number of log events by the DDU weight, for the time period being measured. For example, if the total log data per month sent to Dynatrace was 60 GB, this equals 60 million log events per month (assuming that the average log event size is 1kb). The monthly DDU consumption is 30,000 DDUs (60,000,000 log events x .0005 DDUs), with the annual equivalent of 360,000 DDUs (30,000 DDUs x 12 months).

Custom Traces

A Custom Trace is licensed on the basis of ingestion of spans (span = a single operation within a trace).

To calculate DDU consumption for Custom Traces, multiply the total number of spans by the DDU weight, for the time period being measured. For example, an API service is instrumented with OpenTelemetry and ingests on average 10 spans per API call via the Dynatrace® Trace API. If the average number of API calls per month is 1 million, the monthly DDU consumption is 7,000 DDUs (1,000,000 invocations x 10 spans x 0.0007 DDUs), with the annual equivalent of 84,000 DDUs (7,000 DDUs x 12 months).

While a trace may contain spans captured with OneAgent® and Dynatrace® Trace API, ONLY spans ingested via the Dynatrace Trace API consume DDUs. An API service instrumented with OpenTelemetry and with OneAgent, that captures the spans, no DDUs are consumed for the spans captured within this service.

Custom Events

Custom Events are consumed on the basis of ingestion of custom events (custom event = Kubernetes event, external event, or event created from log message). Currently, only Kubernetes events and events created from log messages are billed.

To calculate DDU consumption for Custom Events, multiply the total number of custom events by the DDU weight, for the time period being measured. For example, if the total number of Kubernetes events per month is 1 million, the monthly DDU consumption is 1,000 DDUs (1,000,000 Custom Events x 0.001 DDUs), with the annual equivalent of 12,000 DDUs (1,000 DDUs x 12 months).

Serverless Functions

Serverless Functions, as a capability type, is licensed on the basis of the number of monitored function invocations. The term “function invocations” is equivalent to “function requests” or “function execution”. The Serverless Functions capability type is used to support monitoring end-to-end tracing of serverless functions. Other methods of monitoring serverless functions include cloud services integrations, which consume custom metrics. When a Serverless Functions platform host is monitored with OneAgent and consuming Host-Units, the monitored function invocations are included.

To calculate DDU consumption for Serverless Functions, multiply the total number of monitored function invocations by the DDU weight, for the time period being measured. For example, if the total number of monthly function invocations is 1 million, the monthly DDU consumption is 2,000 DDUs (1 Million invocations x .002 DDUs/invoke), with the annual equivalent of 24,000 DDUs (2,000 DDUs x 12 months).

Log Management and Analytics; Business Events

To enable (i) Log Management and Analytics, or (ii) Business Events, the customer tenant must be hosted on an active Dynatrace® SaaS environment and connected to a Dynatrace® Grail™ cluster (currently available in select AWS regions).

Log Management and Analytics and Business Events are capability types licensed on the basis of consumed data volume in gigabytes (GB). Total DDU consumption is calculated separately for each capability based on the DDU weight of three dimensions of data usage (Ingest & Process, Retain, and Query) multiplied by the volume of GB of data.

“Ingest & Process” refers to the volume of data in gigabytes sent to Dynatrace via OneAgent® or API before enrichment and processing. To calculate DDU consumption for Ingest & Process, multiply the total number of GB ingested by the DDU weight by the number of days data is ingested. For example, if 500 GB of data is consumed per day, the monthly DDU consumption for Ingest & Process is 1,500,000 DDUs (500 (GB data) x 100 (DDU weight) x 30 (days)).

“Retain” refers to the volume of uncompressed data saved to storage after data parsing, enrichment, transformation, and filtering. To calculate DDU consumption for Retain, multiply the total number of GB of processed data added per day by the number of days the data will be retained, then multiply by the DDU weight. For example, if 900 GB of data is added to storage and retained for 35 days, the monthly DDU consumption for Retain is 283,000 DDUs (900 (GB data) x 35 (retention period days) x 0.30 (DDU weight) x 30 (days)).

“Query” refers to the volume of uncompressed data stored and read during the execution of a DQL query. To calculate the DDU consumption for Query, multiply the total number of GB of data read during query execution by the DDU weight. For example, if 25,000 GB of data is read through DQL queries in one month, the monthly DDU consumption for Query is 42,500 DDUs (25,000 (GB data) x 1.70 (DDU weight)).

APPLICATION SECURITY

Dynatrace Application Security enables customers to detect, visualize, analyze, monitor, and remediate security incidents in production and pre-production environments at runtime.

Dynatrace Application Security is provided via configuration of a Dynatrace® OneAgent® on a monitored host in a customer’s environment. A OneAgent operating in Full-stack or Infrastructure Monitoring mode is a pre-requisite to enable Dynatrace Application Security.

Runtime Vulnerability Analytics and Runtime Application Protection capabilities are consumed based on Application Security Units (ASUs). ASUs are consumed by each deployed and executed instance of a Capability Type measured by the indicated unit weight. Runtime Application Protection requires Runtime Vulnerability Analytics to be enabled as a pre-requisite.

Dynatrace Application Security Unit (ASU) Weighting Table		
Maximum RAM Memory Available To Operating System Where OneAgent is Installed	Runtime Vulnerability Analytics <i>Application Security Units per hour</i>	Runtime Vulnerability Analytics & Runtime Application Protection <i>Application Security Units per hour</i>
1.6 GB	0.1	0.2
4 GB	0.25	0.5
8 GB	0.5	1
16 GB	1	2
32 GB	2	4
48 GB	3	6
64 GB	4	8
80 GB	5	10
N x 16	N	N x 2

Runtime Vulnerability Analytics

Runtime Vulnerability Analytics detects and analyzes vulnerabilities in running applications. For each finding, automated risk and impact assessment is provided which guides the users’ remediation activities.

Runtime Vulnerability Analytics can be enabled as a standalone Application Security capability or utilized in combination with Runtime Application Protection.

To calculate ASU consumption for Runtime Vulnerability Analytics, measure the maximum RAM memory available where OneAgent is installed and find the associated ASU weight in the Weighting Table above. For example, a 64GB RAM consumes 4 ASUs per hour or 96 ASUs per day (4 ASUs per hour x 24 hours).

Runtime Application Protection

Runtime Application Protection leverages code-level insights and transaction analysis to detect and block attacks on running applications automatically and in real-time.

To calculate total ASU consumption for Runtime Application Protection and Runtime Vulnerability Analytics (pre-requisite), measure the maximum RAM memory available where OneAgent is installed and find the associated ASU weight in the Weighting Table above. For example, a 64GB RAM running both Runtime Vulnerability Analytics and Runtime Application Protection consumes 8 ASUs per hour or 192 ASUs per day (8 ASUs per hour x 24 hours).

CLOUD AUTOMATION

Dynatrace Cloud Automation may be enabled within the Dynatrace platform to allow customers to automate application delivery and operational tasks for hybrid cloud and enterprise environments.

Dynatrace Cloud Automation Units are consumed through API calls (events) triggering services requiring one or more service executions, such as an application deployment, a Slack message, the opening of a support case, etc. Each service execution consumes one Cloud Automation Unit.

MISSION CONTROL SUPPORT SERVICES FOR MANAGED CLUSTERS

Dynatrace Managed Mission Control Support Services requires an active maintenance or subscription contract. Dynatrace Managed provides cluster software for deployment on Customer provisioned and controlled infrastructure. The Customer needs to provide hardware and operating system instances according to the specifications outlined in Dynatrace's online documentation for set up and configuration of Dynatrace Managed.

The Customer enables outbound access (to a set of fixed IP addresses) of the Dynatrace Managed cluster nodes to the Internet to perform license validation and, the automatic download of update packages (deployment is defined by the Customer), and to send self-monitoring health metrics of the Dynatrace Managed cluster node(s). All communication is outbound-only, encrypted (TLS 1.2) and fully auditable by the Customer. All monitoring data remains on the Customer-defined infrastructure.

DYNATRACE PREMIUM HIGH AVAILABILITY FOR DYNATRACE MANAGED

Dynatrace Premium High Availability allows Dynatrace Managed clusters to be deployed across regionally distributed data centers enabling resilience against data center outages. It is an additional license measured by the peak Host Units monitored by a Dynatrace Managed cluster.

DYNATRACE ONE PREMIUM

Customers may purchase Dynatrace ONE Premium enablement and support for an additional fee. When purchased, Dynatrace ONE Premium will be available for Customer's subscriptions and/or licenses for Dynatrace SaaS or Dynatrace Managed ("Dynatrace Products") that are active on the Start Date shown on the Order Form. Additional purchases of Dynatrace Products during the Term will be accompanied by an incremental Dynatrace ONE Premium fee. Renewal fees will be based on the Dynatrace Products licensed at the time of renewal. The Dynatrace ONE Premium offering is described online in the Services & Support section of our website and includes on-boarding or coaching sessions with a Product Specialist. These sessions can be purchased in increments of 1, 2 or 3 per week and do not carry forward if not used weekly.