



DX SaaS

SaaS Listing

INTRODUCTION

The DX SaaS solution encompasses the following functional areas:

- App Experience Analytics (End User Monitoring)
- Application Performance Management
- App Synthetic Monitor (Synthetic Monitoring)
- Infrastructure Monitor
- Operational Intelligence (Analytics)

This document provides standards and features that apply to the DX SaaS offering provided to the Customer and defines the parameters and additional terms for the offering that pertain to the following:

- Definitions
- Billing metric
- Raw data retention
- Data location information
- Service level availability (SLA) targets and measurement
- Service level credits
- Data backup

Capitalized terms in this document have the meaning ascribed to them herein or, otherwise, in the quote, order form, statement of work, or other mutually agreed ordering document (each a "Transaction Document") and the applicable end user agreement or governing contract (collectively, the "Agreement") between Customer and the Broadcom entity ("Broadcom") through which Customer obtained a license for the DX SaaS solution.

1. DEFINITIONS.

- "Device" is a unit described in this section for data sources administered, managed, monitored, or controlled by DX SaaS as specified in the Documentation.
- "APM Application Agent Device" is a type of Device that is described in the Application Performance Management Functionality below.
- "Infrastructure Device" is a type of Device that either does not fit in the Application Performance Management Functionality or is further described under Infrastructure Monitor functionality. Infrastructure devices are collected through APM Application Agent Device entitlement credits or dedicated licensing.

2. BILLING METRIC.

Customer may use DX SaaS for the number of **Devices** set forth in the Transaction Document. The number of Devices consumed by Customer is counted monthly based on the functional area and technology being monitored. There is no month-to-month rollover of unused Devices. The calculation with respect to the number of Devices consumed is as follows:

Application Performance Management Functionality (APM Application Agents)

Device calculation:

- For Java applications, each running instance of a monitored JVM (Java Virtual Machine) using the standard APM Java Agent consumes 4 Devices.
- For Java application, each running instance of a monitored JVM (Java Virtual Machine) using the Containerized Services Agent mode or eBPF agent consumes 2 Devices.
- For .NET and .NET Core applications, each OS instance running a monitored .net application or CLR (Common Language Runtime) consumes 4 Devices.
- For PHP applications, each running instance of the PHP Probe agent consumes 2 Devices.
- For NodeJS and OpenSource Tracing tool monitored applications, each monitored application process consumes 0.4 Devices.
- For Python applications, each OS instance running a monitored Python application consumes 4 Devices.
- C++ and Go SDK metrics consume no Devices if directly calling the agent SDK as long as the usage for any of the above APM Application Agents is greater than zero.

Entitlement:

- For every APM Application Agent Device licensed above, Customer is entitled to an equal number of Infrastructure Device licenses which may be used towards the “Infrastructure Monitoring Functionality” listed below or any Infrastructure Device.
- Direct platform API ingestion of metric data cannot count towards entitled Infrastructure devices and requires additional Device licenses.

Infrastructure Monitor Functionality

This section excludes Data ingested into DX SaaS by APM Application Agents described above.

The following Device license description governs API ingestion of metric data:

- 1250 collected metrics from Infrastructure Agent/EPAgent (IA) or ingested using DX platform API are counted as 1 Infrastructure Device unless listed explicitly in this section.
- 1250 collected metrics from Open Telemetry or Telegraf are counted as 1 Infrastructure Device
- Host or Web Server instance Monitoring by IA installed on any node, including those monitored by APM Application Agents, are counted as 1 Infrastructure Device.
- The number of VMs/Servers running remote host monitoring is counted as 1 Infrastructure Device each
 - In the VMWare ecosystem, every ESX server within vCenter counts as 1 Infrastructure Device
- Each node in an Oracle E-Business Suite environment counts as 1 Infrastructure Device
- Each database instance like MySQL, DB2, Oracle, PostgresSQL, SAP Hana Instance, and SQL Server are counted as 1 Infrastructure Device, which includes database tracing for supported platforms.
- Hybrid Cloud and Container monitoring, each “Compute Resource” on Amazon EC2, Azure VM, Google Compute, Amazon RDS or Kubernetes, and OpenShift containers are counted as 1 Infrastructure Device irrespective of remote/local monitoring.
 - Managed services from public cloud providers, *other than specific ones mentioned above*, use the Number of metric-based volumetric calculations for Device mapping (e.g., *Serverless offerings like Amazon Lambda, API Gateway, S3, SNS, SQS, etc., E.g., Services like Amazon ECS, Azure Kubernetes Service (AKS), Google Kubernetes Engine (GKE), Kubernetes and OpenShift*).

Real User Monitoring Functionality (previously App Experience Analytics)

- For mobile and browser monitoring utilizing AXA functionality, 625 Consumer EUMAUs consume 1 Device.
- For mobile and browser monitoring utilizing AXA, 38 Business EUMAUs consume 1 Device.

App Synthetic Monitor Functionality

- Each basic monitor running on a 10-minute frequency consumes 0.2 Devices.
- Each basic monitor running on a 5-minute frequency consumes 0.4 Devices.
- Each basic monitor running on a 1-minute frequency consumes 2 Devices.
- Basic monitors with frequencies more than 10 minutes are equivalent to 10-minute frequency basic monitors.
- Each Advanced Monitor configured for 5-minute frequency counts as 2 Devices.
- Each Advanced Monitors configured for 15-minute frequency counts as 0.5 Devices.
- Each 5-minute Real Browser Monitor configured counts as 2 Devices.
- Each on-premise Real Browser Monitor configured counts as 0.05 Devices.

Intelligence Platform (previously Operational Intelligence and platform functionality)

Device counts are determined by the data ingestion source and need to be explicitly licensed when used with Operational Intelligence capabilities

- 1 Device for every 2 APM Application Agent device licenses (DX SaaS or on-premise). Infrastructure monitoring licenses that were granted through APM Application Agent entitlement will require additional licensing if the associated APM Application Agents are licensed for OI.
- 1 Device for every 2 DX Infrastructure Management (DX IM on-prem) Device licenses.
- 1 Device for every 4 DX Netops Management Device licenses.
- 1 Device for every 1250 metrics ingested into OI from a 3rd party monitoring source.
- 1 Device for 1GB/day logs ingested, with 30 days retention.
- For 3rd party monitoring sources, application agents count as 4 devices and the following are counted as 1 Device each: a host, a device, a node, an application, a server or a computer system.

Additional Billing Definitions

“Consumer End User Monthly Active Users” are the number of End User Monthly Active Users (“EUMAU”) accessing Consumer Applications at least once in a given calendar month.

“Business End User Monthly Active Users” are the number of EUMAU accessing Business Applications at least once in a given calendar month.

“Business Applications” are internal employee-facing or business-to-business (B2B) applications.

“Consumer Applications” are marketing and business-to-consumer (B2C) applications.

For the avoidance of doubt, if an internal employee of Customer utilizes both internal-facing business applications and external consumer applications, their activity counts against both license counts.

EUMAU

Out of the Box EUMAU

In the initial configuration, or “out of the box” configuration, the number of EUMAU is counted based on the data available without application modification. Therefore, the EUMAU license count is simply a count of the number of unique mobile devices accessing applications monitored by App Experience Analytics plus the number of unique browsers monitored by App Experience Analytics.

Unique monitored mobile devices that invoke one (1) monitored native mobile application one (1) time in a month count as one (1) EUMAU. Unique monitored browsers that invoke a Single Page Application (SPA) OR more than two (2) full page views as monitored by App Experience Analytics in a given calendar month count as one (1) EUMAU.

- If a uniquely identified browser invokes less than three (3) full page accesses of non-SPA applications in a given calendar month, it does not consume an EUMAU license and that browser's activity does not count against the total browser page view limitations (SaaS only limitation).
- For SaaS delivery, the browser license count is subject to a total page view pool limitation. Each licensed EUMAU adds 300 page views to the allowable pool of monthly page views. If the monitored page view count exceeds the allowable pool, additional EUMAU licenses must be secured to increase the pool size.

EUMAU with Application Customization

With optional application configurations, the required EUMAU license count will more accurately reflect the actual number of digital users consuming the applications monitored by App Experience Analytics.

These configurations are in the form of the App Experience Analytics native mobile and browser APIs to uniquely identify real individual users as understood by Customer. Each end-user identified via App Experience Analytics APIs shall incur a single EUMAU count across all their mobile device and browser use.

This real user license consolidation across all mobile devices is subject to a 20- different-native-applications-access cap in a given calendar month. Browser activity is still subject to a total page view pool limitation. Each licensed EUMAU adds 300 page views to the allowable pool of monthly page views. If the monitored page view count exceeds the allowable pool, additional EUMAU licenses must be secured to increase the pool size.

For the avoidance of doubt, licensing of all remaining non-identifiable (anonymous) activity reverts to the before mentioned “out of the box” licensing count guidance.

EUMAU Counting Examples

Corporation XYZ has 1,000,000 unique browsers accessing consumer applications, 2 mobile consumer applications with 50,000 unique devices a month, 5,000 unique employee browsers accessing internal business applications, and 2 native mobile business applications each with 2,000 unique devices a month.

Example 1

Corporation XYZ decides not to do API work to identify real users.

EUMAU Licensing Count:

1,000,000 unique browsers	1,000,000 Consumer EUMAU
50,000 mobile app #1	+ 50,000 Consumer EUMAU
<u>50,000 mobile app #2</u>	<u>+ 50,000 Consumer EUMAU</u>
= 1,100,000 Consumer EUMAU	

5,000 unique business browsers	5,000 Business EUMAU
2,000 mobile business app #1	+ 2,000 Business EUMAU
<u>2,000 mobile business app #2</u>	<u>+ 2,000 Business EUMAU</u>
= 9,000 Business EUMAU	

Example 2

Corporation XYZ incorporates API work to identify real users across all monitored components. On the consumer side, all identified mobile users also use the web application. However, 10% of mobile use is anonymous and cannot be tracked via APIs.

On the business side, Corporation XYZ has 5,000 real users accessing their business applications, and all native mobile application access is via a subset of these users.

EUMAU Licensing Count:

1,000,000 unique browsers	1,000,000 Consumer EUMAU
50,000 mobile app #1	+ 5,000 Consumer EUMAU
<u>50,000 mobile app #2</u>	<u>+ 5,000 Consumer EUMAU</u>
= 1,010,000 Consumer EUMAU	

5,000 unique business users	5,000 Business EUMAU
2,000 mobile business app #1	+ 0 Business EUMAU
<u>2,000 mobile business app #2</u>	<u>+ 0 Business EUMAU</u>
= 5,000 Business EUMAU	

3. RAW DATA RETENTION.

App Experience Analytics Functionality

Broadcom commits to the retention of 45 days of metric and session data. Data older than 45 days is subject to deletion as a maintenance function of the SaaS environment.

Application Performance Management Functionality

Broadcom commits to the retention of 400 days of time-series metric data at the following resolutions:

From Day	To Day	Resolution
0	7	15 seconds
8	23	60 seconds
24	90	5 minutes
91	400	15 minutes

Time series metric data older than 400 days and transactional data older than 7 days are subject to deletion as a SaaS environment's maintenance function.

Infrastructure Management Functionality

Broadcom commits to the retention of 400 days of time-series metric data at the following resolutions:

From Day	To Day	Resolution
0	7	15 seconds
8	23	60 seconds
24	90	5 minutes
91	400	15 minutes

Time series metric data older than 400 days and transactional data older than 7 days are subject to deletion as a SaaS environment's maintenance function.

Synthetic Monitor Functionality

Broadcom commits to the retention of 400 days of time-series metric data at the following resolutions:

From Day	To Day	Resolution
0	7	15 seconds
8	23	60 seconds
24	90	5 minutes
91	400	15 minutes

Time series metric data older than 400 days and assets (JTL files, HAR files, Screenshots, video data) older than 14 days are subject to deletion as a SaaS environment's maintenance function.

Standard metric data (ASM Classic tenants) is retained for 6 months. Standard metric data older than this is subject to deletion as a maintenance function of the SaaS environment.

Operational Intelligence Functionality

Broadcom commits to the retention of alarm data for 30 days. Log ingestion up to 1GB/day is retained for 10 days.

Broadcom commits to the retention of 400 days of time-series metric data at the following resolutions:

From Day	To Day	Resolution
0	7	15 seconds
8	23	60 seconds
24	90	5 minutes
91	400	15 minutes

Default logs data retention is 30 days.

Data older than this is subject to deletion as a maintenance function of the SaaS environment.

4. DATA LOCATION.

All data on deployed systems and in backups reside within the **United States of America or Europe** depending on Customer preference, with the exception that some data from App Synthetic Monitor will reside in the countries where points of presence, which are chosen by users, are located. Broadcom reserves the right to change the location of the data within the stated countries and will notify Customer of any such changes.

5. SERVICE LEVEL AVAILABILITY (SLA).

Broadcom commits to the Service Level Availability as indicated in the table below for the SaaS offering production environments during the Subscription Term of the service. If the Service Level Availability committed decreases below the **Threshold for Service Availability Default** listed below, Customer may be entitled to take additional action as outlined in the SaaS Listing.

Components / Capabilities	Target Service Level Availability	Threshold for “Service Availability Default”
App Experience Analytics	99.8%	98.5%
Application Performance Management	99.8%	98.5%
App Synthetic Monitor	99.8%	99.5%
Operational Intelligence	99.8%	98.5%

6. METHOD OF MEASURING SLA.

Broadcom measures Service Level Agreement targets as described below:

Broadcom runs test scripts using application monitoring tools on the Broadcom multi-tenant environment.

Test procedures are conducted approximately once every three to five (3-5) minutes, twenty-four (24) hours per day, seven days per week, throughout the contracted term of the service. Test procedure monitors the status page for service availability every 3-5 minutes.

Planned outage time periods are defined as downtime of the solution availability for periodic and required maintenance events where Broadcom provides notice to Customer.

7. SERVICE LEVEL CREDITS.

In the event of a service availability default as evidenced by the monthly SLA report of the production environment furnished to the Customer from Broadcom, Customer is entitled to a specific number of days of credit of fees based on the annual fees paid and as indicated below. Customer must notify Broadcom within thirty (30) days from the date Customer becomes eligible to receive a service level credit. Failure to comply with this requirement will forfeit Customer's eligibility to receive the service level credit. Any credits issued to Customer will be applied towards the next billing period applicable to Customer or as otherwise agreed to between Customer and Broadcom. This Service Level Credit policy states Customer's sole and exclusive remedy from Broadcom for any service availability default.

Service Level credit for Availability Default
3 days

8. DATA BACKUP.

Broadcom commits to the following data backup and business continuity setup during the Subscription Term of the service:

All Customers of the SaaS offering shall have their data backed up locally on a daily basis. Data loss is limited to less than 24 hours, including in the event of a primary data center disaster.