Maximo Application Suite

- License Key information for Customers

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Maximo Application Suite License keys – how to…

There are lots of questions about licensing and license keys used for MAS. This presentation summarizes what is needed and where to find the information needed to make this 'easy'…or at least to understand the process

- Maximo Application Suite uses a token-like licensing model. Instead of tokens it uses Application points (AppPoint).

- When a customer purchases MAS, they acquire a number of AppPoints based on which MAS applications they will use, the types of users they will need and if there are any Install AppPoints required for the select applications.
    - The customer's Sales or Business Partner contact will work with you to estimate the # of MAS AppPoint you will need

- Once MAS is purchased, the customer will receive a Welcome Email that includes the URL link to the IBM License Key Center. This is where the customer downloads the AppPoints they purchased and are entitled to.

Maximo Application Suite – License key terms

| Term	Definition
License Key Center	this is where customers download and manage their license key file (AppPoints)
Suite License Server (SLS)	The Suite License Service (SLS) **stores and manages the Maximo Application Suite license**. You upload the license file (pool of appoints) to the SLS server as part of initial setup. Each Maximo Application Suite instance can be connected to a unique SLS instance.
MAS License Key	The license key is provided with your purchase of Maximo Application Suite, and you can download the file from the License Key Center by logging in to your IBM Rational License Key Center account. The login information is provided with the License Key Center welcome letter. For more help on licensing, see the IBM support - Licensing page on IBM.com.
Entitlement Key	Obtain an entitlement key for MAS, required for installation: • Log in to the IBM Container Library with a user ID that has software download rights for the company's Passport Advantage entitlement. MyIBM Container Software Library • Entitlement key is displayed in the Container software library or select Get entitlement key • Under the Access your container software heading, click Copy key. • Copy the key to a safe location.
MAS AppPoints	Application Points (AppPoints) are used to track and enforce user entitlement and access across Maximo Application Suite. At creation time, the MAS Admin will assign each user an entitlement level: none, limited, base, or premium. Each level is associated with an AppPoint cost. Any Maximo Application Suite workspace has a number of AppPoints allocated, which is set by the license. These AppPoints are consumed as users log in and use the product.

MAS - Administer license and AppPoints usage

Understand AppPoint allocation

- The Maximo Application Suite license usage is managed by the Suite License Service (SLS). Each Maximo Application Suite instance can be connected to a unique SLS instance, or multiple Maximo Application Suite instances can share an SLS and the corresponding license file.

- For shared Suite License Service, the following conditions apply to the usage report AppPoint data:
    - The pool of AppPoints granted by your license is shared among all Maximo Application Suite instances in the order of requests.
    - Reserved and concurrent user logins from multiple Maximo Application Suite instances only result in a single checkout of AppPoints on condition that the entitlement of the logged in user is the same.
    - Each Maximo Application Suite licensing report shows the total AppPoint usage across all Maximo Application Suite instances that share the Suite License Service.

- Documentation URL:

https://www.ibm.com/docs/en/mas-cd/continuous-delivery?topic=administering-licenses-apppoints-usage

Maximo Application Suite – SLS Usage Examples

- Each MAS instance has unique SLS pool of AppPoints
- Example, customer purchased 1000 AppPoints, split across instances
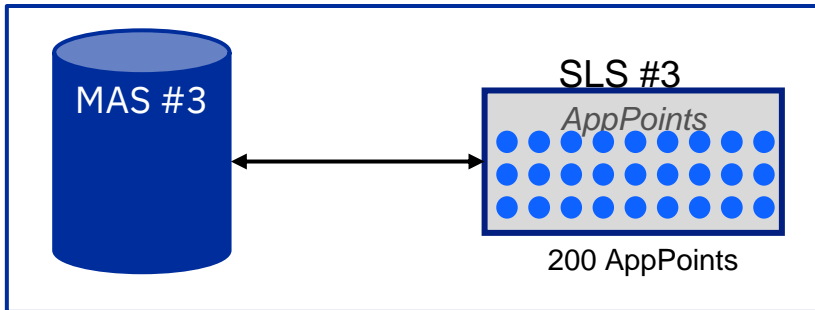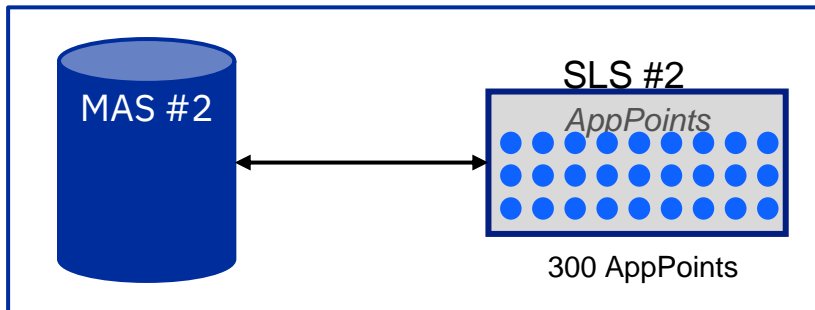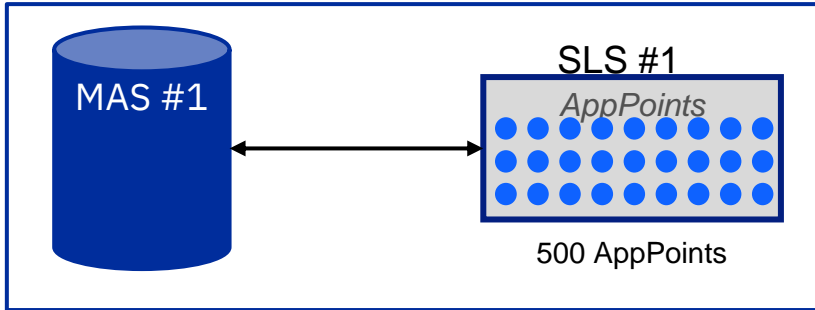
- Each MAS instance shares a single SLS pool of AppPoints
- Example, customer purchased 1000 AppPoints, shared across instances
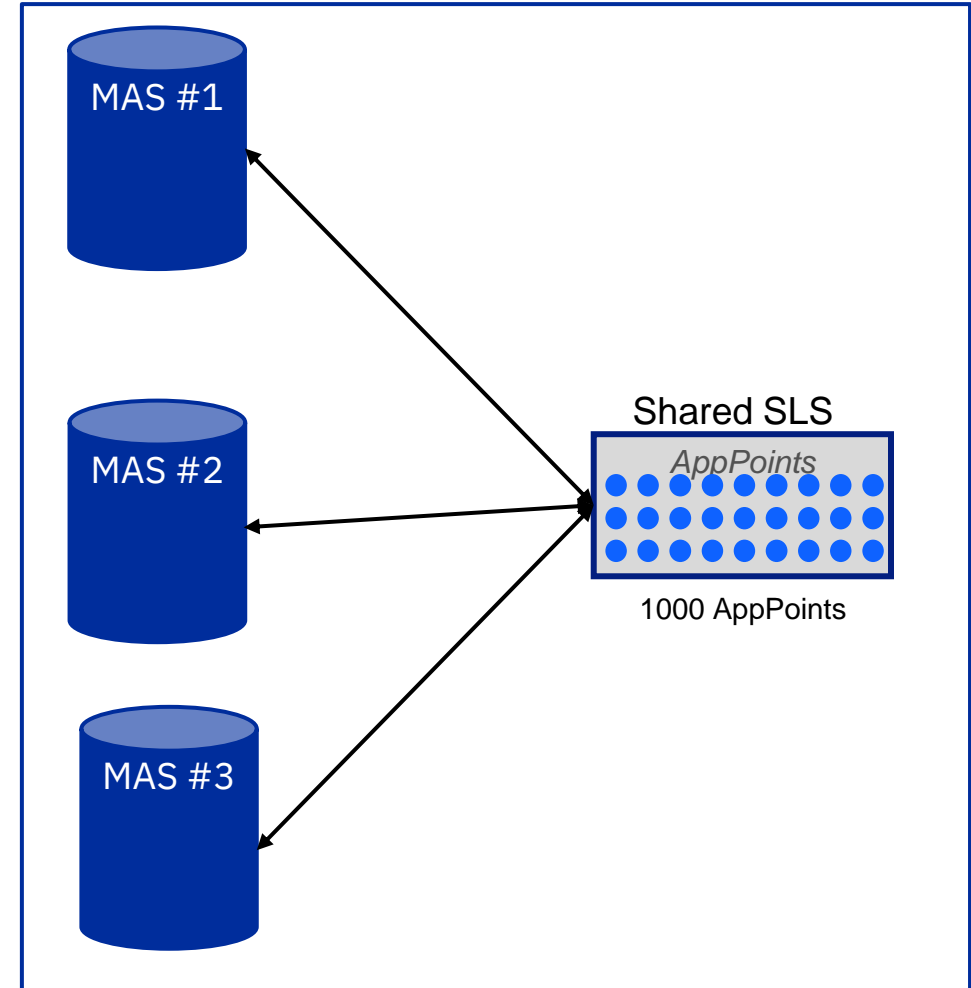
License Key Center

Leaving the IBM Web site…

• The License Key Center (LKC) is where a customer downloads the AppPoints they have purchased

• The LKC is outside of IBM…

• Here is the URL to the LKC:

https://licensing.subscribenet.com/control/ibmr/login

• The Customer will need to log into the License Key Center

MAS License keys – Obtaining your entitlement key

In addition to the MAS AppPoints, customers are also required to have an Entitlement Key

Here is the link to the IBM documentation on this process:

https://www.ibm.com/docs/en/cloud-paks/1.0?topic=clusters-obtaining-your-entitlement-key

You can verify and gain access to your container software by using your IBM entitlement key. To obtain your entitlement key, complete the following steps:

- Log in to MyIBM Container Software Library with the IBMid and password that are associated with the entitled software.

- Click the *Container software library* twistie > **View library** to verify if your entitlement key is valid for the product that you want to install.
  - o If *View library* is not selectable, or the product that you want to install is not listed, the identity that is logged in does not have entitlement for installing that product.

- If you require the entitlement key for your software, in the *Entitlement keys* section, click **Copy key** to copy the entitlement key to the clipboard.

Accessing Red Hat entitlements from your IBM Cloud Paks

- Maximo Application Suite (MAS) includes IBM Cloud Pak for Data (CP4D)

- CP4D includes the entitlement to use Red Hat OpenShift

- This Url is to the documentation/process for how to access Red Hat entitlements from CP4D for use with MAS

- It does require a Red Hat Account which can be set up for free

https://www.ibm.com/docs/en/cloud-paks/1.0?topic=suocpc-accessing-red-hat-entitlements-from-your-cloud-paks

- IBM Cloud Pak® solutions can include entitlement to use Red Hat® OpenShift® Container Platform, Red Hat Enterprise Linux® CoreOS (RHCOS), and Red Hat Enterprise Linux (RHEL).
    - To access these entitlements, you must link your IBM Cloud® Paks to your Red Hat account. You can link your IBM Cloud Pak to its Red Hat entitlement through IBM Passport Advantage.
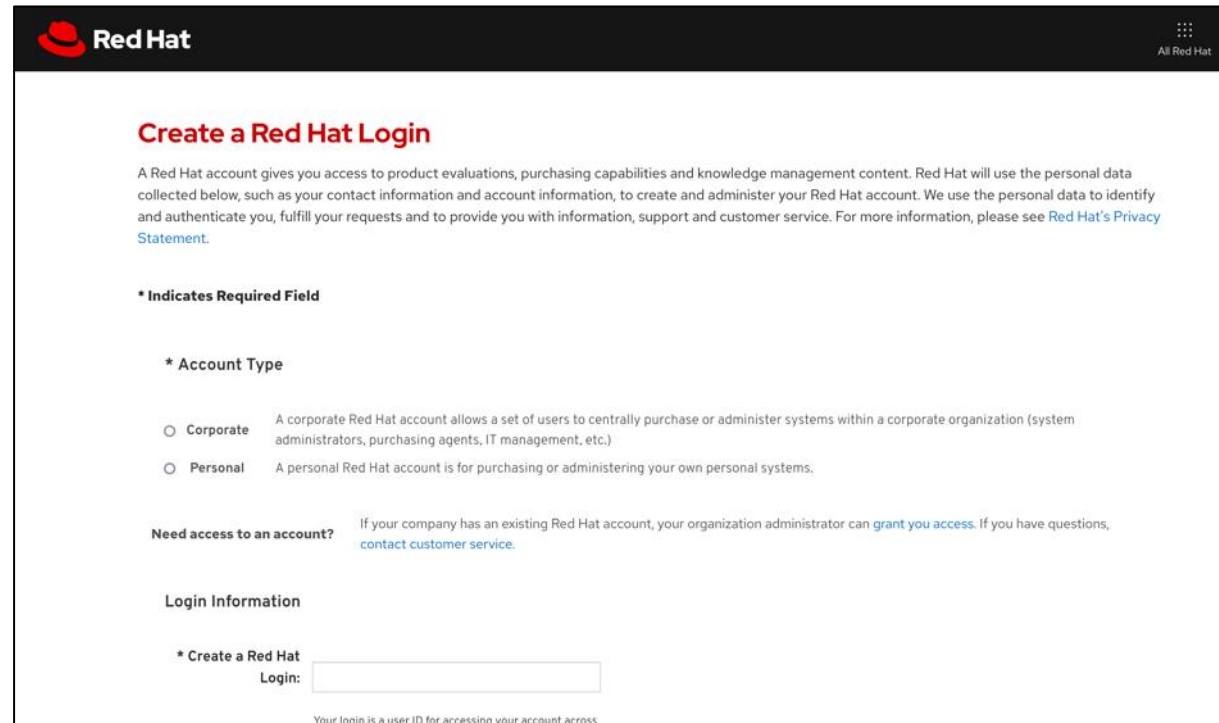
Installing OpenShift Container Platform clusters:

https://www.ibm.com/docs/en/cloud-paks/1.0?topic=installing-openshift-container-platform-clusters

How a customer can create Red Hat account

- If Customer does not have a Red Hat account yet, Customer can create a Red Hat account quickly here: https://www.redhat.com/wapps/ugc/register.html?_flowId=register-flow&_flowExecutionKey=e1s1

Frequently Asked Questions

Question	Answer
Can AppPoints be shared across multiple MAS environments?	Yes. The Maximo Application Suite license usage is managed by the Suite License Service (SLS). Each Maximo Application Suite instance can be connected to a unique SLS instance, or multiple Maximo Application Suite instances can share an SLS and the corresponding license file.
What happens if a single end user logs into multiple MAS environments at the same time (i.e. test and production)? Will they consume double apppoints?	For shared Suite License Service, the following conditions apply to the usage report AppPoint data: • The pool of AppPoints granted by your license is shared among all Maximo Application Suite instances in the order of requests. • Reserved and concurrent user logins from multiple Maximo Application Suite instances only result in a single checkout of AppPoints on condition that the entitlement of the logged in user is the same. • Each Maximo Application Suite licensing report shows the total AppPoint usage across all Maximo Application Suite instances that share the Suite License Service.
What happens if an end user logs into a single MAS instance, with 2 browser sessions at the same time? Will they consume double the apppoints?	Reserved and concurrent user logins from multiple Maximo Application Suite instances only result in a single checkout of AppPoints on condition that the entitlement of the logged in user is the same.
Can a customer that upgrades/trades up to MAS continue to use their Maximo 7.6.1 environment?	Yes, the MAS licensing includes the entitlement to use Maximo 7.6.1. Customers can continue to use their existing environments, but should plan to technically upgrade to MAS before 7.6.1 is end of support (EOS), on September 30, 2025.
If a customer does a license upgrade/trade up to MAS, but still uses 7.6.1 is there a way to estimate how many apppoints they would consume if they were really using MAS Manage?	Yes, there is an Apppoint utility a customer can install into their Maximo 7.6.1.2 environment. It will keep track of daily peak apppoint consumption, simulating how many apppoints they would have used. Contact your IBM Seller or Business Partner for details.
IBM Cloud Paks: Support for Red Hat Entitlement - Frequently Asked Questions (FAQ)	https://www.ibm.com/support/pages/node/1096000

Frequently Asked Questions

Question	Answer
Link to additional License Key Center information	https://www.ibm.com/support/pages/ibm-support-licensing-start-page
SLS High Availability (HA) What happens if the SLS is unavailable, does MAS lock-out users from logging in?	If the SLS goes down, users will be locked-out and prevented from logging in, even if Enforcement is turned off. IBM Development is also working on SLS High Availability as part of their backlog items.
Can a customer's AppPoints be split across different instances of MAS?	Yes, For example, if a customer purchases 1000 apppoints and has 3 different locations, they assign 500 to #1, 300 to #2 and 200 to location #3. This managed through the License Key Center download site.
Some MAS applications have Install AppPoints (Manage ERP connectors, Spatial, MVI, Assist, etc.). Do these require AppPoints for both Production and non-Production instances of MAS?	Beginning with MAS 8.9, Customers will be able identify an instance of MAS as Non-production. For non-production instances apppoints will not be consumed for the Install based applications/functionality. AppPoints will continue to be consumed for each Production instance. The License Information document is also updated to reflect this change.
What if a customer has a situation where they may need all users logged in at the same time which would exceed the # of available apppoints? For example, utility companies that have to deal with unplanned storm outages. Can MAS Support this?	Yes, MAS can be configured to have AppPoint Enforcement turned off. This allows for users to log in, even if there are insufficient apppoints available. MAS still keeps track of consumption for reporting purposes and customers are required to send usage reports to IBM. If customers are consistently exceeding their pool of apppoints, they may be charged by IBM for this usage. If Enforcement is on, 'Concurrent' users will be blocked from logging in when there are not enough apppoints available in the pool (SLS). Alternatively, customers can define users as 'Authorized', which reserves apppoints for each unique user, these users will never be blocked from logging into MAS.

Downloading Software and verifying Entitlement

URL to Documentation on downloading the software:

- https://ibmdocs-test.mybluemix.net/docs/en/MAS-review_test?topic=suite-downloading-software-verifying-entitlement

IBM Maximo Application Suite /   ✉ Feedback   ☰ Product list

Downloading software and verifying entitlement

Last Updated: 2022-10-12

Before you install Maximo Application Suite, you must download the software and verify that you are entitled to the container software.

Be aware of the following entitlement notes:

– The use of IBM Spectrum Fusion and Red Hat OpenShift Data Foundation Essentials, previously known as Red Hat OpenShift Container Storage, in Maximo Application Suite is limited only with Bring-your-own-license (BYOL) hosting on Amazon Web Services (AWS).

– Customers with IBM Maximo Application Suite Reserved entitlements have bring-your-own-license (BYOL) Red Hat OpenShift Container Platform or Hyper-scaler Red Hat services and should use their own agreements for versions that the Maximo Application Suite documentation shows as supported. Customers with Reserved entitlements must not use the Red Hat OpenShift Container Platform that is available with Maximo Application Suite entitlement.

– IBM Cloud Pak solutions can include entitlement to use Red Hat OpenShift Container Platform, Red Hat Enterprise Linux® CoreOS (RHCOS), and Red Hat Enterprise Linux (RHEL). To access these entitlements, you must link your IBM Cloud® Paks to your Red Hat account. You can link your IBM Cloud Pak to its Red Hat entitlement through IBM Passport Advantage. For more information, see IBM Cloud Paks: Accessing Red Hat entitlements from your IBM Cloud Paks.

12

Downloading Software and verifying Entitlement

URL to Documentation on Accessing Red Hat entitlements from your IBM Cloud Paks:

https://www.ibm.com/docs/en/cloud-paks/1.0?topic=iocpc-accessing-red-hat-entitlements-from-your-cloud-paks

IBM Cloud Paks / 1.0 /   ✉ Feedback   ☰ Product list

Accessing Red Hat entitlements from your IBM Cloud Paks

Last Updated: 2022-07-14

IBM Cloud Pak® solutions can include entitlement to use Red Hat® OpenShift® Container Platform, Red Hat Enterprise Linux® CoreOS (RHCOS), and Red Hat Enterprise Linux (RHEL). To access these entitlements, you must link your IBM Cloud® Paks to your Red Hat account. You can link your IBM Cloud Pak to its Red Hat entitlement through IBM Passport Advantage.

Complete the following procedure to access your Red Hat entitlements:

1. Go to the IBM Passport Advantage Online tab at IBM Passport Advantage, click **Sign in to your PAO Site**, and log in with your IBMid.

   Notes:

   - The Customer Primary Contact name on your IBM order is passed to Red Hat to accept the Red Hat terms and conditions and link entitlements, then are tied to that Red Hat account number.
   - If your company has multiple sites, an extra *Sign in* screen appears for you to select a specific company site number.

2. On the Passport Advantage Online page, click **Download Software**.

3. On the Software downloads page, confirm your *Site Name* and *Site number* and enter your IBM Cloud Pak part number in the search field, then press Enter. You can find your IBM Cloud Pak part number in your Proof of Entitlement (POE) document. If you do not have your specific part number handy, or, if you have more than one IBM Cloud Pak that you want to link, search for `Cloud  Pak`.

4. Scroll over the product name of the IBM Cloud Pak that has the entitlement that you want to link, a **View more** link appears. Click **View more** for that IBM Cloud Pak.

5. Verify the IBM Cloud Pak product description and click **Continue**.

   Important: Do not change or enter data in the *Version*, *Operating System*, or *Language* fields.

6. Locate the *Link with Red Hat* heading in the *Specification* section. Click the order number that corresponds to the order number that you want to link your entitlement to. Click **Okay** to navigate away from Passport Advantage Online to the Red Hat login page to map your IBM entitlement to your Red Hat account. Previously linked orders show up under the *Red Hat account* row under *Specifications*.

13

Configuring MAS AppPoint Enforcement (enable/disable)

Link to the documentation for more details:
https://www.ibm.com/docs/en/mas-cd/continuous-delivery?topic=administering-licenses-apppoints-usage#compliance

Understand AppPoint consumption

AppPoints usage is divided into reserved and concurrent usage.

Reserved usage The AppPoints are reserved permanently from the organization pool when an authorized access user is created. Reserved AppPoints are also consumed when you deploy applications that have a reserved cost. Concurrent usage The AppPoint cost is applied when a concurrent access user is logged in to Maximo Application Suite. When a user starts a session, AppPoints corresponding to the assigned entitlement are checked out. When the user session ends, the AppPoints are returned.

Understand denial and overage usage

Denial and overage usage shows the cumulative number of AppPoints that were blocked or that were checked out beyond your entitlement during the report window.

If your environment is configured for compliance enforcement, concurrent users are blocked from logging in if the AppPoint entitlement is exceeded. If enforcement is not configured, the overage might incur extra costs.

Configure licenses

On the Configuration tab you can enable or disable compliance enforcement, set a default login message, set automatic reporting, and upload a new license file.

Set compliance enforcing

The number of AppPoints that are allocated to each Maximo Application Suite workspace is set by the product license. These AppPoints are consumed as you deploy applications, add-ons, and industry solutions that come with an AppPoint cost, and also when users log in and use the product. You can configure your environment to enforce the AppPoints limit and block users from logging in if the AppPoint entitlement is exceeded. For more information about AppPoint costs, see AppPoints.

14

Configuring user authentication sessions

User Authentication Sessions
To increase application security and ensure that AppPoints are promptly returned when users close their browsers or tabs without first logging out, you can configure user authentication session behavior. You configure user authentication session behavior by changing the expiration time for the access and refresh token in the custom resource (CR) file for Maximo Application Suite.

About this task
By default, the expiration time is 12 hours for the access token and 1 week for refresh token. The optimal expiration time is 30 minutes for the access token and 12 hours for refresh token. To avoid unexpected behavior, the minimum that you can set the expiration time is 15 minutes for the access token, and 12 hours for refresh token.

Use this URL for Documentation on how to change the default setting:

- https://www.ibm.com/docs/en/mas-cd/continuous-delivery?topic=configuring-user-authentication-sessions

* Contact your IBM Seller or Business Partner for details

Maximo 7.6.1.2 – Optional AppPoint Utility

For customers that have contractually moved to MAS, but will continue to use 7.6.1.2, we added new components to MAM 7.6.1.2 to enable periodic reporting of concurrent and authorized use from an apppoint perspective, as an alternative to license server enforcement. Once installed and configured, it uses security profiles to calculate the user entitlements established by the Maximo Application Suite in order to simulate apppoint consumption.

- New database tables
  - Internal lists of products and points
  - Calculated daily peaks, user and install
  - Daily user list at the time of peaks
- New app, AppPoint Licensing Setup
  - Hidden in security by default
  - New cron task logic to calculate the user types, daily peaks and peak users
  - Dialog for viewing the results
- Current restrictions:
  - English only
  - Installation on demand by qualified customers only – not in IFIXes
- Prereqs
  - Maximo 7.6.1.2
  - Login tracking ON (Security Groups -> Security Controls -> Enable Login Tracking? Y)
  - MAXLICMONITOR service ON (DB Config -> Services -> MAXLICMONITOR Active? Y)
- Available in Box: https://ibm.box.com/s/uxat6zui4t4lzr5qa96e6sq7rex07ton

16

* Contact your IBM Seller or Business Partner for details

Frequently Asked Questions about the License Key Server

The IBM Rational License Key Center (LKC) is an online license key delivery and management service that provides you easy access to the keys associated with your IBM Rational and Maximo products.

The URL Link below is for the download of Frequently Asked Questions relating to a wide variety of topics with the LKC

For example:
- How do I get my License Keys once I've placed my order with IBM?
- How long does it take for my keys to show up in the License Key Center after I place my order with IBM?
- What did IBM use as my IBM Rational License Key Center account ID?
- How can I add other users to my License Key Center account?
- Can users add themselves to my account without having an administrator manually add them?
- How do I see my orders on the IBM Rational License Key Center?
- How do I get my license key?

URL link to download the FAQ pdf file:

- https://www.ibm.com/support/pages/system/files/inline-files/FAQ_english_1.pdf

What happens if you need to change our Primary contact?
- Contact eCustomer Care to change Primary and/or Site technical contact info paonline@us.ibm.com or 800 978 2246

Maximo Application Suite
Best of class capabilities to provide complete view of your assets

Manage	**Monitor**	**Health**	**Predict**	**Visual Inspection**	**Assist**
Intelligent Asset Management	Monitor and Detect Anomalies	360 View of Assets	Predictive Failures	AI-Powered Insights	Prescriptive Assistance

IBM Cloud Pak for Data | IBM Watson Studio | IBM Watson ML | IBM Watson Discovery | IBM Watson Assistant | IBM App Connect

Red Hat OpenShift
Infrastructure Independent
Common Operating Environment

IBM Cloud · aws · Azure · Google Cloud · Edge · Private · Systems

Simplified Licensing and Usage

MAS AppPoints will be used across suite

Entitlement covers the whole suite. AppPoints are expended based primarily upon different active User types

Available as Subscription or Perpetual Licenses
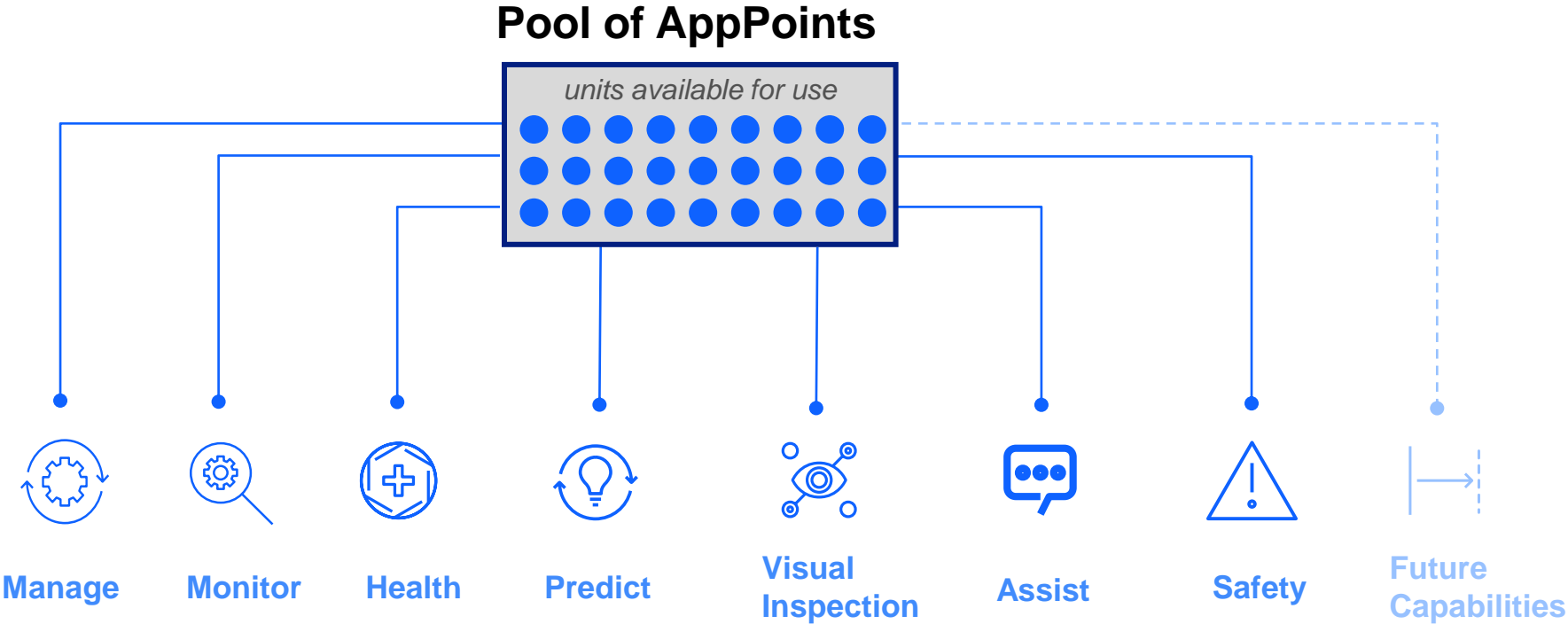
1. Single license

One entitlement to entire Suite

2. Flexible consumption

Sharing of license through concurrent users

3. Simplified usage

Access applications without additional provisioning

Pool of AppPoints

units available for use

Manage   Monitor   Health   Predict   Visual Inspection   Assist   Safety   Future Capabilities

19

MAS License Model

- 4 User types
- Authorized & Concurrent
- Install based

Premium User

Concurrent 15 AppPoints	Authorized 5 AppPoints

Manage
Industry Solutions
- Oil & Gas, Aviation, Transportation, Utilities, Nuclear, Civil Infrastructure

Add-ons
- Asset Configuration Manager, Service Provider, Health, Safety & Environment

Predict
Health and Predict - Utilities
Visual Inspection

Base User

Concurrent 10 AppPoints	Authorized 3 AppPoints

Manage
Includes:
- Linear
- Calibration
- Spatial (requires install)
- Scheduler

Health

Limited User

Concurrent 5 AppPoints	Authorized 2 AppPoints

3 Modules:
- Manage
- Manage Industry Solutions
- Manage Add-ons

Mobile
- Maximo Mobile
- Assist
- 3rd Party

Monitor

Self Service User

Free
0 AppPoints

Self Service Applications
- Service Requests
- Desktop Requisitions
- Requests (Oil & Gas)
- Create/Review Incidents (HSE)
- Vehicle Requests (Transportation)
- Graphical Appt Book (Scheduler)
- Bill review (Service Provider)

Install – 1 AppPoint (x multiplier) Production Only	SAP/Oracle/Workday Connector (x80)	Spatial (x20)	Civil Infrastructure (x50)	Visual Inspection (x45) Edge (1)	Assist (x150)	Health & Predict Utilities (x60)	Optimizer / Optimizer Limited (x220) / (x60)

Shared Pool of AppPoints

Concurrent Application Users

Check in/out AppPoints on a regular occurrence as users' login/out of the Suite.

Always rotating the amount of AppPoints in the pool.

Installs

These AppPoints are required for each MAS instance and are "reserved" on install of application.

Authorized Application Users and Administrators

These AppPoints are "reserved" to ensure Admins and Authorized users always have access to the application suite.

units available for use