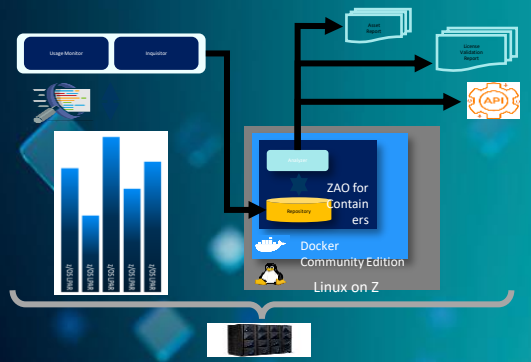
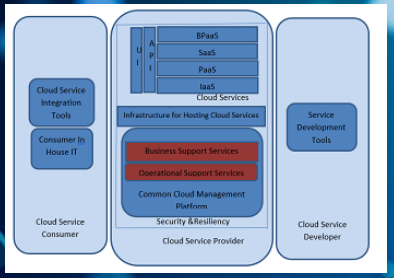
HCLSoftware



Z Asset Optimizer V2.2 What You Need to Know

HCL Z Asset Optimizer



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Review of Z Asset Optimizer(ZAO) prior to V2.2

Introducing Z Asset Optimizer (Both Platforms zOS and zLinux(containers)

HCL Z Asset Optimize (ZAO) is a **market leading software asset discovery product** for IBM® z/OS® mainframe technology

ZAO recognizes over **15,000+ mainframe software products and features** from IBM and other software vendors and provides comprehensive software inventory reports

Tracks and reports usage of **In-house z/OS applications** – Batch workload , CICS , IMS transactions written in COBOL, PL/I, C/C++, REXX , Java

Software assets and their usage are **discovered automatically** by a batch inquisitor and a real-time usage monitor

Audit and compliance – Effectively used for discuss licensing and audit compliance with software vendors

Optimize Mainframe software cost by eliminating less frequently used software and ensuring supported software is being used

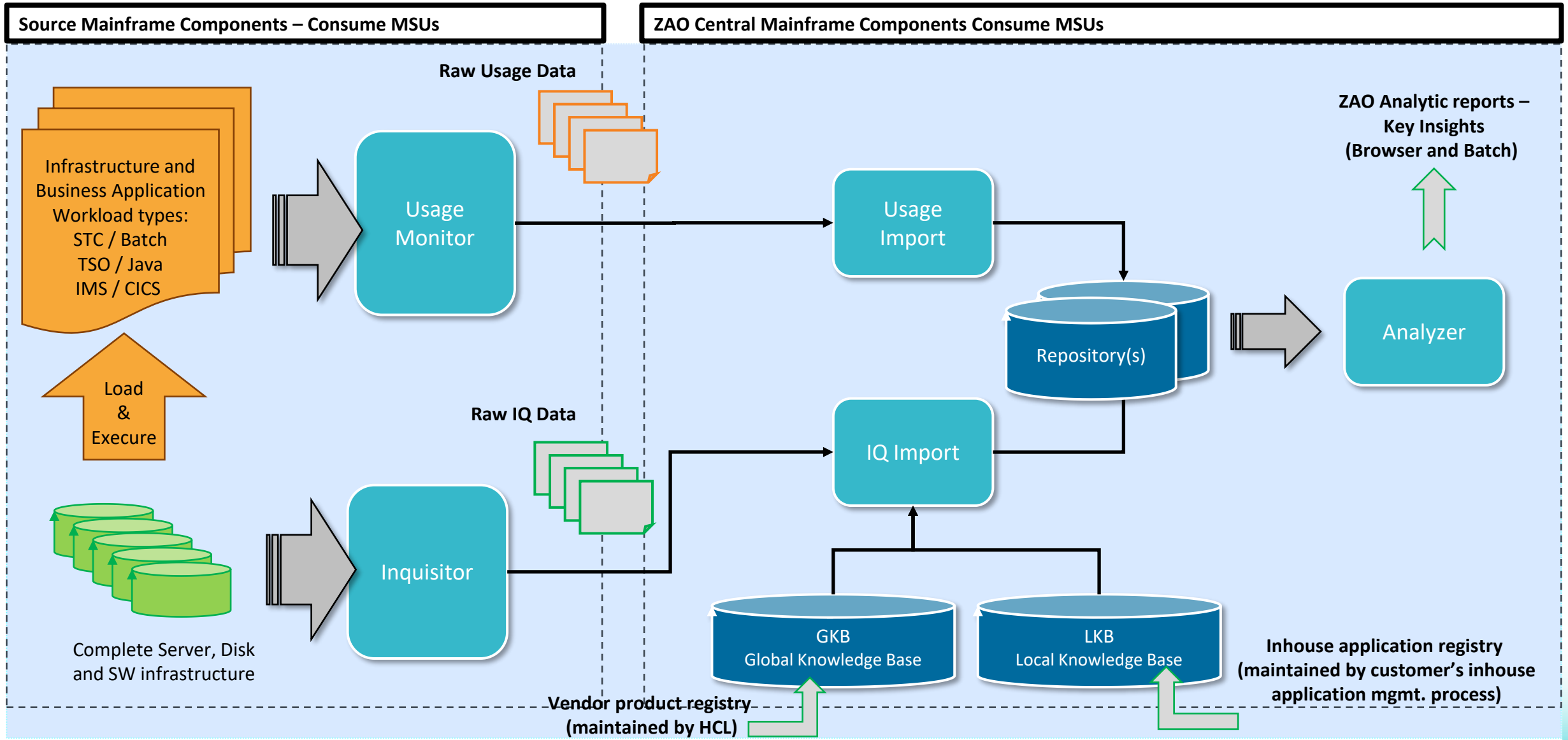
Flexible Pricing options

Batch Inventory Discovery

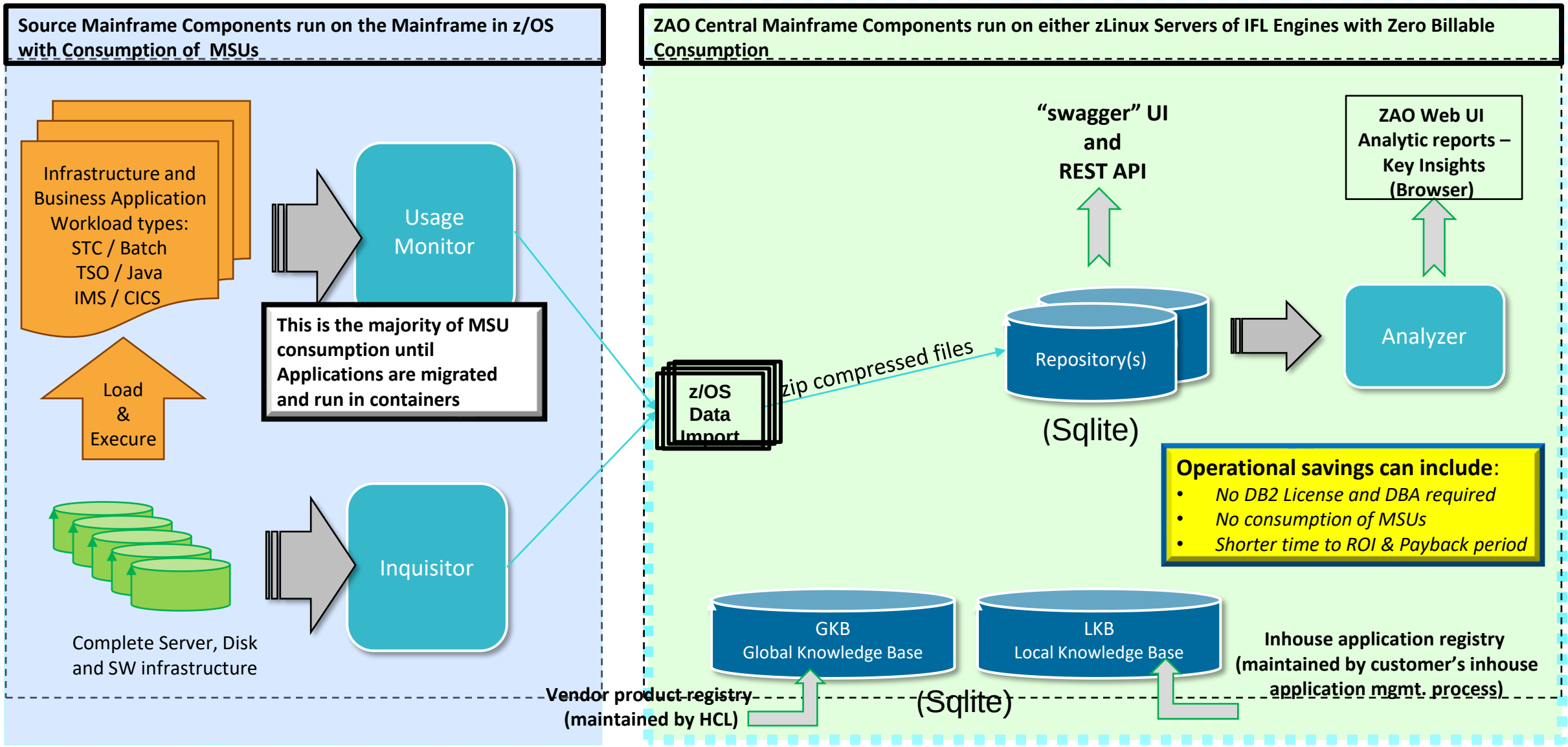
Usage Monitoring

Reporting

ZAO Core Architecture (z/OS) All Components Run on the Mainframe in z/OS



ZAO Core Architecture (Containers) – assuming no refactoring or rewriting of in house/3rd Party application from Legacy to zLinux



Strategy WOW themes - ZAO v2.2

C R

Driving toward a lower Mainframe Total Cost of Ownership via Costing Method employed

- ✓ Tailored Fit Pricing reporting
- ✓ Common sense approach to accounting for the amount of work done
- ✓ Updated SQLite option vs DB2

Greater operational efficiency optimization

- ✓ Two Z Platforms
- ✓ A more agile approach to Optimizing Costs of Business Applications & Assets
- ✓ 19 new or enhanced functions

Advanced functions and support for enhanced visibility for greater actionable key insights

- ✓ Rest APIs to access asset management data
- ✓ 11 new or enhanced functions related to visibility through reporting

What’s new in ZAO 2.2

ZAO V2.2 – SUMMARY

HCL ZAO 2.2 - For z/OS platform only, not containers

- SCRT Tailored Fit Pricing
- IBM VUE support – VUE007

Driving toward a lower Mainframe ***Total Cost of Ownership*** via Costing Method employed

- GKB Search Function
- Extended PID support

Advanced functions and support for ***enhanced visibility*** for greater actionable key insights

- Library Classification
- Full IMS support in UMON
- Remove Dataspace requirement in UMON
- Product Suite Support

Enhanced UMON capabilities for greater ***operational efficiency*** optimization

What’s new in ZAO 2.2

SQLite

Operational efficiency

- Updated SQLite to latest level for improved performance

SCRT Tailored Fit Pricing

Lower Mainframe TCO

Enhanced visibility for greater actionable key insights

- Support has been added for SCRT Tailored Fit Pricing with new reports

Product Suite Support

Enhanced visibility for greater actionable key insights

- ZAO now supports Product Suites/Bundles. These are viewable in the Product Inventory report and also the new Product Suite report.

Enhanced visibility for greater actionable key insights

Library Life Cycle

- Added new Function Library Life Cycle to allow users to view data across different libraries. Classifications are created in the Analyzer and then these are assigned to Products and Libraries. The Product Libraries report will now show these classes.

What's new in ZAO 2.2 cont

Analyzer inactivity timeout — Operational efficiency

- Added the ability to logoff users after a set period of time from the Analyzer

Inconsistent Product Names — Enhanced visibility for greater actionable key insights

- In the Asset reports users now have the ability to select how IBM product names are displayed. The current Asset name or they can use the Discovered product name (not quite ready)

Header for Analyzer Batch Custom reports — Enhanced visibility for greater actionable key insights

- Users can choose to have headers in their reports in batch mode

Product Use — Enhanced visibility for greater actionable key insights

- New function to show product usage in a more realistic light for contracts people. Instead of showing the number of times load modules belonging to a product were used, users can now see how many times a product was used.

APFAUTH by LPAR — Operational efficiency

- Previously libraries that were found to be APF authorised came from the Inquisitor code. This meant that all LPARs would show that a library was APF authorised. That was not always the case. Now the Usage monitor collects the APF data for each LPAR and this is now shown in the Analyzer library reports.

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What's new in ZAO 2.2 cont

Value Unit Edition (VUE) product support | Operational efficiency

- ZAO now has the ability to show products with their VUE PIDs in the Asset Reports. This a user defined function with a new Admin report Define VUE Product. The user creates this list once and this data is processed each time an IQimport or Usage Import is run.

Physical Delete | Operational efficiency

- ZAO now has the ability to physically delete all obsolete data from the Repository. In previous releases only usage data were physically deleted. Libraries that are no longer being scanned and have aged are now eligible to be deleted together with data associated with the libraries, for example module data. This will allow users who have been running ZAO to recover Db2 space and improve import performance.

IMS Usage collection | Enhanced visibility for greater actionable key insights

- Usage of IMS controlled modules is now accurately collected

Volume Mapping | Operational efficiency

- Volume mapping allows you to group together many volsers under a single id. For sites that have multiple SYSRES volumes that change on a regular basis, instead of having multiple entries for each VOLSER there would be a single entry. All usage would now be associated with this single entry. Inquisitor and Usage Monitor would need to have new DD name pointing to a sequential file containing the mappings.

What's new in Inquisitor 2.2

Parameter updates for HZAPINQ (Inquisitor for z/OS) Operational efficiency

FULLIDR parameter added to support collection of compiler information when used with SCANPGM.

Operational efficiency

PACK=n – control output zip algorithm

NOVSR – suppress the volume statistics report

NOEAR – suppress the execution activity report

NOREP – specify both NOVSR and NOEAR with one keyword

Parameter updates for HZAXINQ (Inquisitor for USS) Operational efficiency

PLX=Y – parameter reintroduced for USS Inquisitor.

PACK=n – control output zip algorithm

OUT=Z/T/B – now removed, output will be controlled by HSIXZIP/HSIXOUT DD name in JCL

If IQ output is to HZAPZIP/HZAXZIP only and abend S213-C8 is encountered, then unzipped output will be written to that DD. If HZAPOUT/HZAXOUT is also present then the program will terminate.

What's new in Usage Monitor 2.2

Operational efficiency

Improvements in Usage Monitor data collection facilitates the following changes:

- **System SVC front ends are no longer installed**
- **A user ESR will be used for CICS and UNIX data collection**
- **Usage of IMS-managed programs is now accurately reported**
- **A count for the number of jobs which use each program each day is kept**
- **The LLC (linklist correction) setting is now retired**
- **CPU time can now be monitored down to the RB level**
- **CPU time consumed by long running address spaces can now be reported progressively each collection cycle**
- **Data set name masking now allows asterisks anywhere**
- **New default exclusion masks of *DBDLIB and *PSBLIB**

The HZABRZIP and HZAZPEEK programs are now documented in the utilities chapter of the Administration Guide.

Migration Support

Automated migration path from ZAO 1.1 database to ZAO 2.2

Operational efficiency

- Repository schema changes for ZAO 2.2 – new tables, columns added, etc.
- JCL jobs supplied to migrate Repository from 1.1 to 2.2
- For both DB2 and SQLite databases
- New GKB database created from latest GKB update
- Usage data migrated from ZAO 1.1 to ZAO 2.2 database
- Amount of usage data will impact how long migration takes
- Consider deleting old usage data prior to migration to reduce migration time

What’s new in ZAO Analyzer 2.2

Enhanced visibility for greater actionable key insights

Asset Reports

- **Added SCRT Tailored Fit Pricing reports**
- **Added Product Suite report**
- **Added Search by PID report for IBM and ISV products**
- **Removed the show Features checkbox from all Asset reports so now all Features are displayed by default**
- **Asset reports now allow you to choose to see Discovered name or Asset name in the report output**

Discovery Reports

- **Removed Show options checkbox from all Discovery reports so now all options are displayed be default**

New Tab Administration Reports

- **Moved reports from Administration Tab to this Tab as they are reports that don’t require special access.**
  - Libraries with Unknown Modules
  - LKB Summary
  - IQ Import Logs
  - Usage Import Logs
  - SQL Select Query

New Administration Reports

- **Exclude Product Suites**
- **Define VUE Products**
- **Define Library Classifications**
- **Assign Library Classifications**

SCRT Tailored Fit Pricing

SCRT Tailored Fit Pricing – What is it?

Definition: ***Is a flexible pricing model that dramatically simplifies the existing pricing landscape through cloud-like, software and hardware consumption-based pricing options for on-premises computing.***

Goals:

1. ***Alternative to MSU capping while fully exploit the CPU capacity installed***
2. ***Increased CPU capacity for Development and Test (DevTest) environments, enabling clients to dramatically increase DevTest activities, without cost consideration***
3. ***Optimized and potential lower pricing for all types of workload growth, without requiring additional IBM approvals, or additional tagging and tracking***

Primary driver: ***Help mitigate unpredictable costs***

Benefit: ***Far more competitive when compared to pay-as-you-go schemes***

The high-level benefits associated with the Enterprise Consumption and Enterprise Capacity solutions can be summarized as:

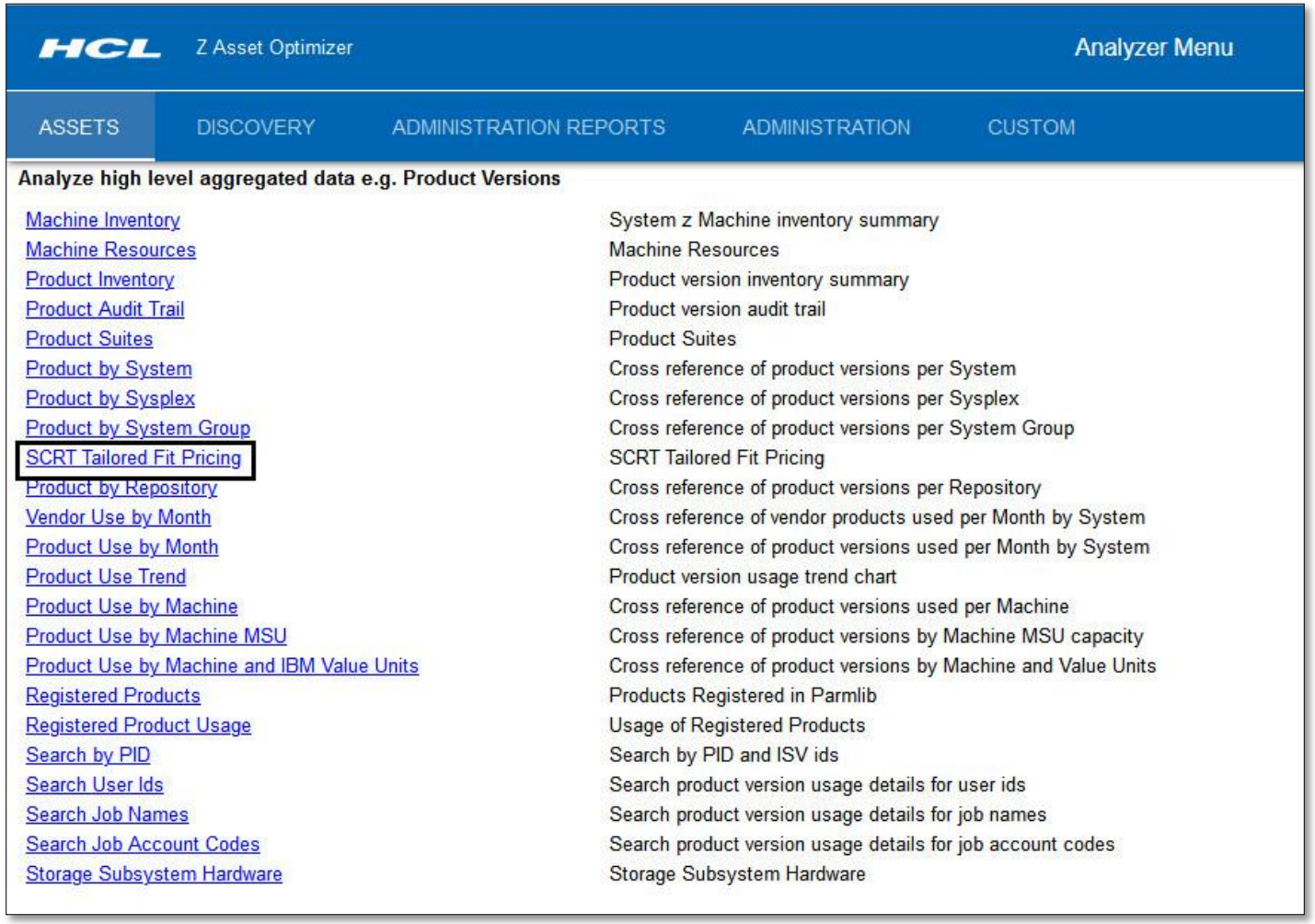
- Licensing models that eradicate cost control capping activities, enabling clients to fully exploit the CPU capacity installed
- Increased CPU capacity for Development and Test (DevTest) environments, enabling clients to dramatically increase DevTest activities, without cost consideration
- Optimized and potential lower pricing for all types of workload growth, without requiring additional IBM approvals, or additional tagging and tracking

SCRT Tailored Fit Pricing

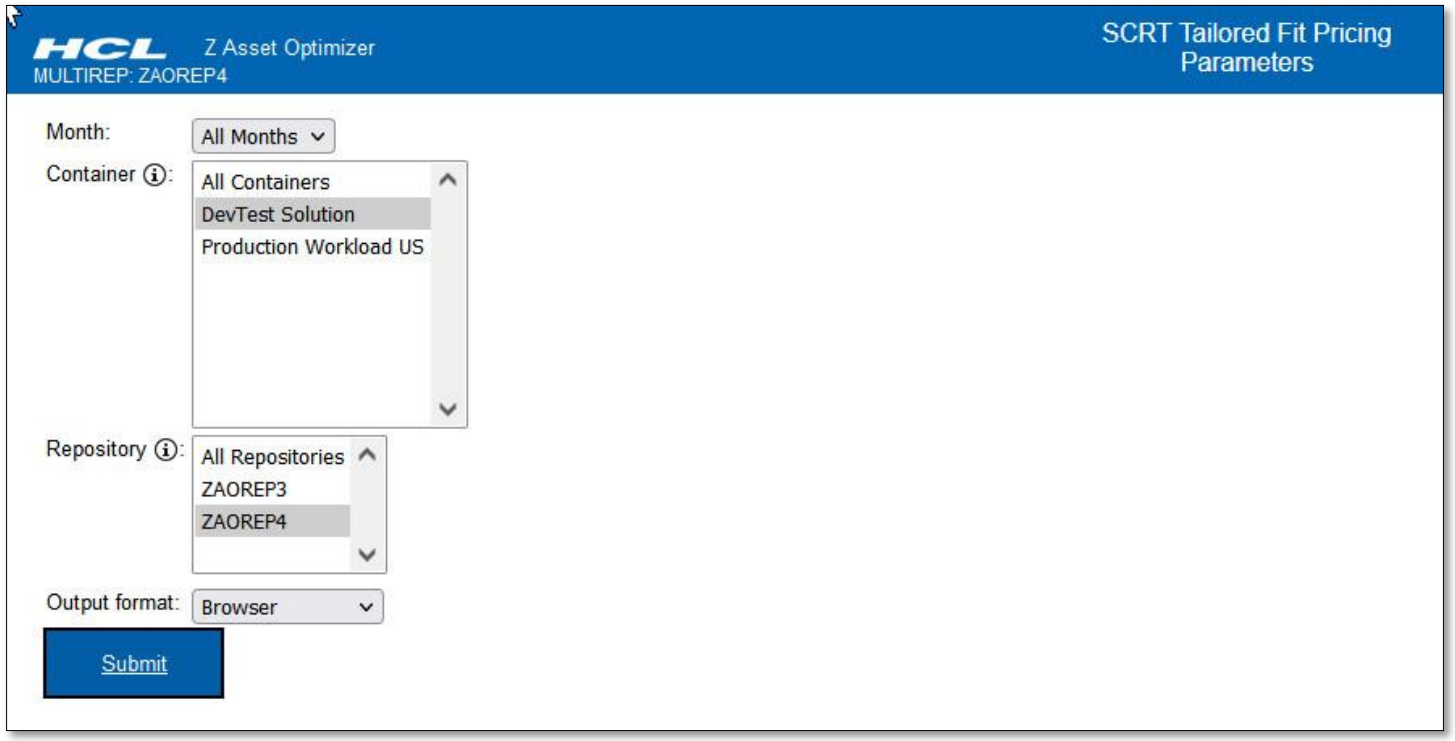
SCRT Tailored Fit Pricing is now supported by new reports

- On the ASSETS tab select **SCRT Tailored Fit Pricing** report
- Supports hybrid pricing (mix of TFP and 4HA)
- If TFP-only, just time-based reporting (minutes)
- If hybrid, MSU consumption will still be reported for 4HA pricing
- As previously, can drill down by containers, LPARs, products
- With TFP, consumption is only reported down to LPAR level, not by Product
- Product type is also reported (MLC or IPLA)

SCRT Tailored Fit Pricing Menu



SCRT Tailored Fit Pricing parameters



SCRT Tailored Fit Pricing Container

HCL Z Asset Optimizer
ZAOREP4

SCRT Tailored Fit Pricing

Crosstab Grid

Month	Machine	CPU MSU	Container ID	Peak 4 Hour	CONTAINER NAME / Total MSU DevTest Solution
2022-04	M1C2	2677	CPS2	50	0
	M2C2	2367	CPS2	192	0
	M3C2	2677	CPS2	249	0
	M5C2	2367	CPS2	262	0
	M6C2	5918	CPS2	5365	0
	M9C1	5918	CPS2	5500	0

6 rows from database query - DB2 DEC3 14:29:50 2022-07-13

```
/asset/scrt_tailored_fit_pricing
container  = DevTest Solution
repository = ZAOREP4
```

SCRT Tailored Fit Pricing LPARs

HCL Z Asset Optimizer
ZAOREP4

SCRT Tailored Fit Pricing LPARs

Month	Machine	LPAR	Container	Peak MSU	Total Minutes	Total Minutes Collected	Missing Minutes	Total MSU
2022-04	M1C2	RT51J01	CPS2	247				42354

1 rows from database query - DB2 DEC3 14:30:49 2022-07-13

SCRT Tailored Fit Pricing Products

HCL Z Asset Optimizer
ZAOREP4

SCRT Tailored Fit Pricing Products

Month	Container ID	Container Name	Product	PID	Product Type
2022-04	CPS2	DevTest Solution	z/OS V2	5650-ZOS	MLC
2022-04	CPS2	DevTest Solution	zSecure Alert V2	5655-N21	IPLA
2022-04	CPS2	DevTest Solution	Application Perf Analyzer for z/OS V14	5655-Q49	IPLA
2022-04	CPS2	DevTest Solution	CICS TS for z/OS V5	5655-Y04	MLC
2022-04	CPS2	DevTest Solution	DB2 12 for z/OS Value Unit Edition	5770-AF3	IPLA
2022-04	CPS2	DevTest Solution	Fault Analyzer for z/OS V14	5655-Q41	IPLA
2022-04	CPS2	DevTest Solution	File Manager for z/OS V14	5655-Q42	IPLA
2022-04	CPS2	DevTest Solution	IBM z/OS Connect EE V3	5655-CE3	IPLA
2022-04	CPS2	DevTest Solution	IBM Connect:Direct for z/OS V6	5655-X12	IPLA
2022-04	CPS2	DevTest Solution	IBM Debug for z Systems V14	5655-Q50	IPLA
2022-04	CPS2	DevTest Solution	IBM HourGlass V7	5655-U59	IPLA
2022-04	CPS2	DevTest Solution	IBM MQ Advanced for z/OS VUE V9	5655-AV1	IPLA
2022-04	CPS2	DevTest Solution	IBM Sterling Connect: Enterprise for z/OS V5	5655-X05	IPLA
2022-04	CPS2	DevTest Solution	IBM Tivoli System Automation for OS/390 V3	5698-SA3	IPLA
2022-04	CPS2	DevTest Solution	IBM Z Common Data Provider V2	5698-ABN	IPLA
2022-04	CPS2	DevTest Solution	IMS V15	5635-A06	MLC
2022-04	CPS2	DevTest Solution	Tivoli NetView for z/OS V6	5697-NV6	MLC
2022-04	CPS2	DevTest Solution	Tivoli OMEGAMON XE for Messaging V7	5698-B23	IPLA
2022-04	CPS2	DevTest Solution	Workload Simulator for z/OS and OS/390 V1	5655-I39	IPLA

Product Suite Support

Product Suite support Asset

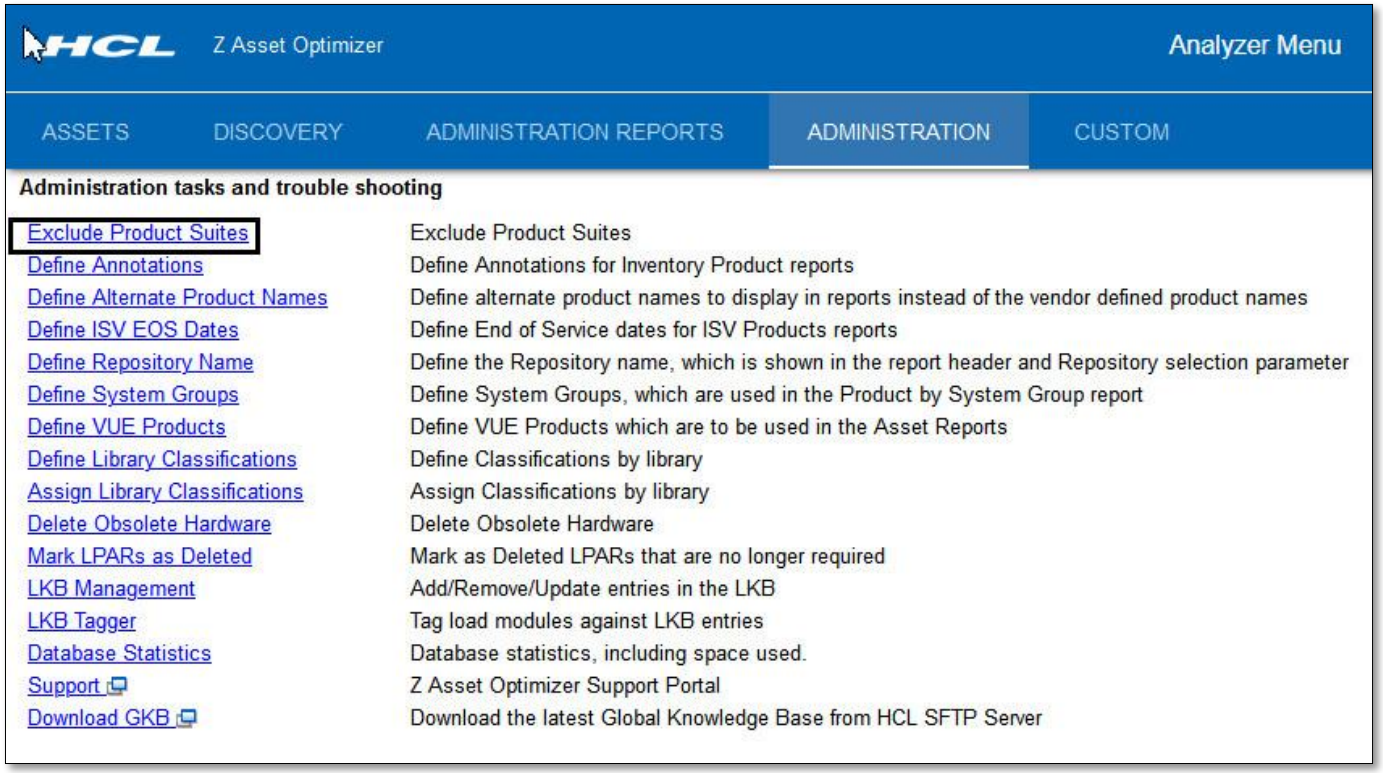
HCL Z Asset Optimizer — Analyzer Menu

ASSETS | DISCOVERY | ADMINISTRATION REPORTS | ADMINISTRATION | CUSTOM

Analyze high level aggregated data e.g. Product Versions

Machine Inventory	System z Machine inventory summary
Machine Resources	Machine Resources
Product Inventory	Product version inventory summary
Product Audit Trail	Product version audit trail
Product Suites	Product Suites
Product by System	Cross reference of product versions per System
Product by Sysplex	Cross reference of product versions per Sysplex
Product by System Group	Cross reference of product versions per System Group
SCRT Tailored Fit Pricing	SCRT Tailored Fit Pricing
Product by Repository	Cross reference of product versions per Repository
Vendor Use by Month	Cross reference of vendor products used per Month by System
Product Use by Month	Cross reference of product versions used per Month by System
Product Use Trend	Product version usage trend chart
Product Use by Machine	Cross reference of product versions used per Machine
Product Use by Machine MSU	Cross reference of product versions by Machine MSU capacity
Product Use by Machine and IBM Value Units	Cross reference of product versions by Machine and Value Units
Registered Products	Products Registered in Parmlib
Registered Product Usage	Usage of Registered Products
Search by PID	Search by PID and ISV ids
Search User Ids	Search product version usage details for user ids
Search Job Names	Search product version usage details for job names
Search Job Account Codes	Search product version usage details for job account codes
Storage Subsystem Hardware	Storage Subsystem Hardware

Product Suite support Admin



Product Suite Parameters

HCL Z Asset Optimizer
MULTIREP: ZAOREP4

Product Suites
Parameters

Please Note that by selecting more than one Repository and viewing the data as a combined report, query runtimes will increase as will CPU consumption. The more Repositories you select the longer the query will take to run.

The Suites listed below have been identified. If you believe that you don't have one of these suites, then go to the Admin Tab and run the report Exclude Product Suites to exclude the suites you don't have.

Vendor:
- All Vendors
- BMC Software
- IBM

Product:
- All Products
- BMC Software - MainView for DB2 Management
- BMC Software - MainView Monitoring
- IBM - DB2 Administration Solution Pack for z/OS
- IBM - IBM Advanced Storage Management Suite for z/OS
- IBM - IBM Z Monitoring Suite
- IBM - IBM Z Service Management Suite
- IBM - IMS Database Solution Pack for z/OS

Multi Repository in Single Report:

Repository:
- All Repositories
- ZAOREP3
- ZAOREP4

Output format: Browser

Submit

Product Suites - Products

HCL Z Asset Optimizer
MULTIREP: ZAOREP4

Product Suites

Vendor	Suite Name	Version	PID	Product	Product Feature	Product Version
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	IBM Tiv OMEGAMON DE z/OS V5	IBM Tiv OMEGAMON DE z/OS V5	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	IBM Tiv OMEGAMON XE z/OS V5	BASE	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	OMEGAMON for CICS V5	BASE	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	OMEGAMON for IMS V5	BASE	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	OMEGAMON for JVM	OMEGAMON for JVM	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	OMEGAMON for Messaging V7	BASE	V7
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	OMEGAMON Storage zOS V5	BASE	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	Tivoli Asset Discov for z/OS	Tiv Asset Discov for z/OS	V8
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	Tivoli OMEGAMON XE for Messaging	OMEGAMON XE for Messaging	V7
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	Tivoli OMEGAMON XE z/OS	IBM Tiv OMEGAMON XE z/OS V5	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	Tivoli OMEGAMON XE CICS	IBM Tiv OMEGAMON XE CICS V5	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	Tivoli OMEGAMON XE MFN	IBM Tiv OMEGAMON XE MFN V5	V5
IBM	IBM Z Service Management Suite	1.6.0	5698-AAF	Tivoli OMEGAMON XE Stor	IBM Tiv OMEGAMON XE Stor V5	V5
IBM	IBM Z Service Management Suite	1.7.0	5698-AAF	IBM Tiv OMEGAMON DE z/OS V5	IBM Tiv OMEGAMON DE z/OS V5	V5
IBM	IBM Z Service Management Suite	1.7.0	5698-AAF	IBM Tiv OMEGAMON XE z/OS V5	BASE	V5
IBM	IBM Z Service Management Suite	1.7.0	5698-AAF	OMEGAMON for CICS V5	BASE	V5
IBM	IBM Z Service Management Suite	1.7.0	5698-AAF	OMEGAMON for IMS V5	BASE	V5
IBM	IBM Z Service Management Suite	1.7.0	5698-AAF	OMEGAMON for Messaging V7	BASE	V7

Exclude Suites

HCL Z Asset Optimizer
ZAOREP4

Define Product Suite Exclusions

Define Product Suites to be excluded from Identification

Action ⓘ: ◉Add ○Remove

Suite Name - Version Name ⓘ:

- IBM DB2 Extended Utilites Suite for z/OS -2.1-5655-EU2
- IBM Z Monitoring Suite -1.1.1-5698-B66
- IBM Z Service Automation Suite -1.3.0-5698-SA1
- IBM Z Service Management Suite -1.6.0-5698-AAF
- IBM Z Service Management Suite -1.7.0-5698-AAF
- IMS Database Solution Pack for z/OS -2.2.0-5655-DSP
- IMS Database Utility Solution Pack for z/OS -2.1.0-5698-DUL
- IMS Fast Path Solution Pack -1.3.0-5655-W14
- IMS Fast Path Solution Pack -2.1.0-5698-FPP
- IMS Performance Solution Pack for z/OS -2.2.0-5698-P21
- IMS Recovery Solution Pack for z/OS -2.1.0-5655-ISR
- IMS Transaction Manager Solution for z/OS -1.1.0-5698-D30

Repository ⓘ: ZAOREP4

Submit

Suite Name	VERSION	PID
IMS Fast Path Solution Pack	2.1.0	5698-FPP
IMS Transaction Manager Solution for z/OS	1.1.0	5698-D30

Product Inventory Suites

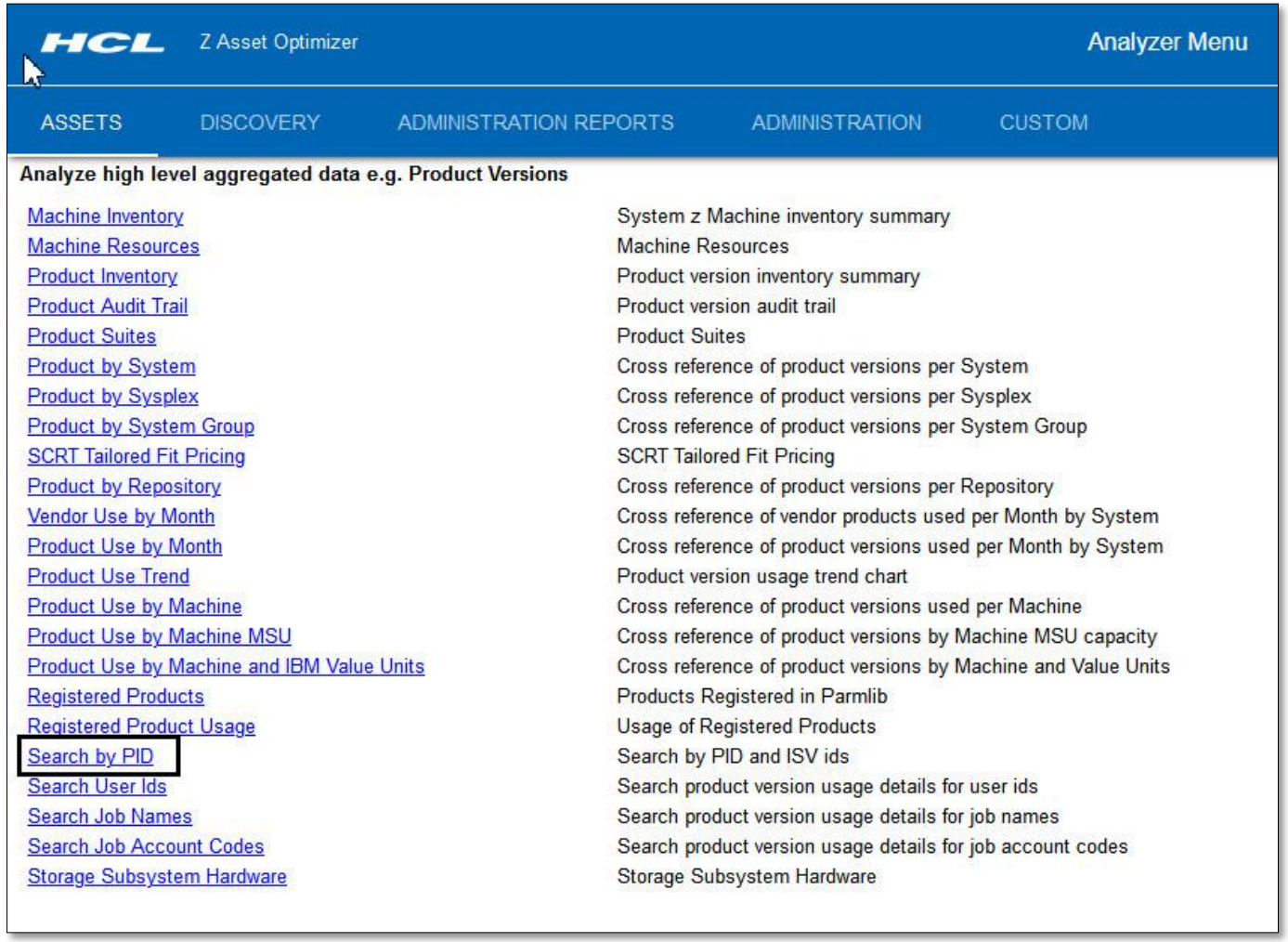
HCL Z Asset Optimizer
MULTIREP: ZAOREP4

Product Inventory

Vendor	Product	Version	PID	S&S PID	Feature	EID	Discovered Installed	Annotation	Systems Installed	Last Used	Systems Used	Machines Used
IBM	DB2 Administration Solution Pack for z/OS	V3	5697-ASP				2021-01-01		5		0	0
IBM	IBM Advanced Storage Management Suite for z/OS	V2	5698-AAJ				2021-01-01		5		0	0
IBM	IBM Z Monitoring Suite	V1	5698-B66				2021-01-01		5		0	0
IBM	IBM Z Service Management Suite	V1	5698-AAF				2021-01-01		5		0	0
IBM	IMS Database Solution Pack for z/OS	V2	5655-DSP				2021-01-01		5		0	0
IBM	IMS Database Utility Solution Pack for z/OS	V2	5698-DUL				2021-01-01		5		0	0
IBM	IMS Performance Solution Pack for z/OS	V2	5698-P21				2021-01-01		5		0	0

Search PID

Search PID Report



Search PID Report

HCL Z Asset Optimizer
MULTIREP: ZAOREP4

Search by PID
Parameters

Please Note that by selecting more than one Repository and viewing the data as a combined report, query runtimes will increase as will CPU consumption. The more Repositories you select the longer the query will take to run.

Search by IBM PID: 5655*
Search by ISV product ID:
Search by ISV PID:

System: All Systems, AU01, AU02, US01, US02, US03

Vendor: BMC Software, Broadcom Inc., Cincom Systems, Inc., Cole Software, Compuware Corporation, eFunds International Ltd, FIS, IBM

Product: All Products, IBM - ACF/NCP, IBM - C/370 Library, IBM - CCCA for OS/390 & MVS & VM, IBM - CICS TS for z/OS, IBM - Common Svcs Library z/OS, IBM - Compiler REXX on zSeries, IBM - Connect:Direct z/OS Std Ed

Show Product Discovery name: ☐
Show SUBCAP Values: ☑
Show SYSPLEX Names: ☑
Show SYSTEM Names: ☑
Show Product Suites only: ☐
Multi Repository in Single Report: ☐

Repository: All Repositories, ZAOREP3, ZAOREP4

Output format: Browser

Submit

Search PID Report

HCL Z Asset Optimizer
MULTIREP: ZAOREP4

Search by PID

Vendor	Product	Version	PID	S&S PID	Feature	EID	Sysplex Name	System Name	MLC	IPLA	SUBCAP	Discovered Installed	Annotation	Systems Installed	Systems Used	Machines Used
IBM	CICS TS for z/OS	V5	5655-Y04		CICS TS for z/OS	S0172DF	AUPLEX	AU01	Y	N		2021-01-01		1	1	1
IBM	CICS TS for z/OS	V5	5655-Y04		CICS TS for z/OS	S0172DF	AUPLEX	AU02	Y	N		2021-01-01		1	1	1
IBM	CICS TS for z/OS	V5	5655-Y04		CICS TS for z/OS	S0172DF	USPLEX	US01	Y	N		2021-01-01		1	1	2
IBM	CICS TS for z/OS	V5	5655-Y04		CICS TS for z/OS	S0172DF	USPLEX	US02	Y	N		2021-01-01		1	1	2
IBM	CICS TS for z/OS	V5	5655-Y04		CICS TS for z/OS	S0172DF	USPLEX	US03	Y	N		2021-01-01		1	1	2
IBM	Common Svcs Library z/OS	V1	5655-CSL	5655CSS	BASE	S017R45	AUPLEX	AU01	Y	N		2021-01-01		1	1	1
IBM	Common Svcs Library z/OS	V1	5655-CSL	5655CSS	BASE	S017R45	AUPLEX	AU02	Y	N		2021-01-01		1	1	1
IBM	Common Svcs Library z/OS	V1	5655-CSL	5655CSS	BASE	S017R45	USPLEX	US01	Y	N		2021-01-01		1	1	2
IBM	Common Svcs Library z/OS	V1	5655-CSL	5655CSS	BASE	S017R45	USPLEX	US02	Y	N		2021-01-01		1	1	2
IBM	Common Svcs Library z/OS	V1	5655-CSL	5655CSS	BASE	S017R45	USPLEX	US03	Y	N		2021-01-01		1	1	2
IBM	Connect:Direct z/OS Std Ed	V5	5655-X09	5655-X10	BASE	S016XGX	AUPLEX	AU01	N	Y		2021-01-01		1	0	0
IBM	Connect:Direct z/OS Std Ed	V5	5655-X09	5655-X10	BASE	S016XGX	AUPLEX	AU02	N	Y		2021-01-01		1	1	1
IBM	Connect:Direct z/OS Std Ed	V5	5655-X09	5655-X10	BASE	S016XGX	USPLEX	US01	N	Y		2021-01-01		1	1	2
IBM	Connect:Direct z/OS Std Ed	V5	5655-X09	5655-X10	BASE	S016XGX	USPLEX	US02	N	Y		2021-01-01		1	0	0
IBM	Connect:Direct z/OS Std Ed	V5	5655-X09	5655-X10	BASE	S016XGX	USPLEX	US03	N	Y		2021-01-01		1	0	0
IBM	DB2 High Perf Unload	V2	5655-I19	5655-E89	DB2 High Perf Unload V2	S00WFM4	AUPLEX	AU01	N	Y	Reference-based	2021-01-01		1	0	0
IBM	DB2 High Perf Unload	V2	5655-I19	5655-E89	DB2 High Perf Unload V2	S00WFM4	AUPLEX	AU02	N	Y	Reference-based	2021-01-01		1	0	0
IBM	DB2 Log Analysis Tool	V3	5655-T56	5655-E86	DB2 Log Analysis Tool V3	S014J6K	AUPLEX	AU01	N	Y	Reference-based	2021-01-01		1	0	0

171 rows from database query - DB2 DEC3 12:47:43 2022-07-13

Library Life Cycle

Life Cycle Reports

HCL Z Asset Optimizer — Analyzer Menu

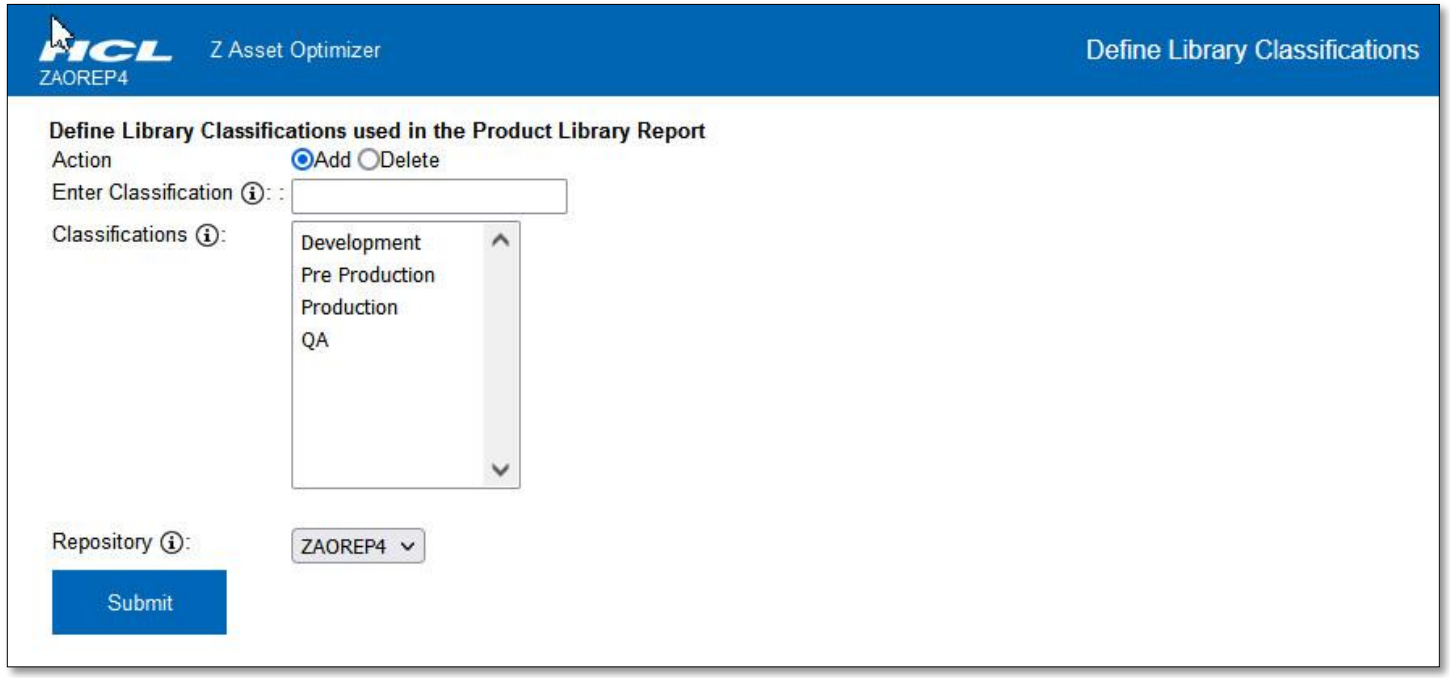
ASSETS | DISCOVERY | ADMINISTRATION REPORTS | ADMINISTRATION | CUSTOM

Administration tasks and trouble shooting

Exclude Product Suites	Exclude Product Suites
Define Annotations	Define Annotations for Inventory Product reports
Define Alternate Product Names	Define alternate product names to display in reports instead of the vendor defined product names
Define ISV EOS Dates	Define End of Service dates for ISV Products reports
Define Repository Name	Define the Repository name, which is shown in the report header and Repository selection parameter
Define System Groups	Define System Groups, which are used in the Product by System Group report
Define VUE Products	Define VUE Products which are to be used in the Asset Reports
Define Library Classifications	Define Classifications by library
Assign Library Classifications	Assign Classifications by library
Delete Obsolete Hardware	Delete Obsolete Hardware
Mark LPARs as Deleted	Mark as Deleted LPARs that are no longer required
LKB Management	Add/Remove/Update entries in the LKB
LKB Tagger	Tag load modules against LKB entries
Database Statistics	Database statistics, including space used.
Support	Z Asset Optimizer Support Portal
Download GKB	Download the latest Global Knowledge Base from HCL SFTP Server

Both require special authority to execute

Define Library Classifications



Assign Library Classifications

HCL Z Asset Optimizer
ZAOREP4

Assign Library Classifications Parameters

This report is used to assign classifications to product libraries. To assign classifications, select the Vendor and Product and press 'Submit'.
This will list all libraries. You can also view specific classifications by selecting the 'Show by Classification' Check box, and then select a class.

System:
- All Systems
- AU01
- AU02
- US01
- US02
- US03

Vendor:
- BMC Software
- Cincom Systems, Inc.
- Cole Software
- Compuware Corporation
- Dovetailed Technologies
- FIS
- Infogix, Inc.
- IBM

Product Release:
- IBM - IBM Debug Tool for z/OS
- IBM - IBM Developer for System z
- IBM - IBM Developer Common
- IBM - IBM DB2 Data Common Access Collector for z/OS
- IBM - IBM DB2 Query Management Facility for z/OS
- IBM - IBM Explorer for z/OS
- IBM - IBM Library for REXX on zSeries
- IBM - IBM MQ for z/OS

Show by Classification: ☐

Class:
- Development

Result row limit: 5000

Repository:
- All Repositories
- ZAOREP3
- ZAOREP4

Submit

Assign Library Classifications

HCL Z Asset Optimizer
ZAOREP4

Assign Classification

Select Classification: Development

Assign | Clear | Exit

Library	Volume	FLIBID	Mod. Cnt.	Classification	System
SYS1.MQM.LPALIB	MWDS22	9844	5		AU02
SYS1.MQM.LPALIB	MW1S12	4883	5		AU01
SYS1.MQM.LPALIB	MW1S12	4883	5		AU02
SYS1.MQM.LPALIB	MW1S22	8348	5		AU01
SYS1.MQM.LPALIB	MW1S22	8348	5		AU02
SYS1.MQM.LPALIB	P16S12	3291	5		US01
SYS1.MQM.LPALIB	P16S12	3291	5		US02
SYS1.MQM.LPALIB	P16S12	3291	5		US03
SYS1.MQM.LPALIB	P16S22	2417	5		US01
SYS1.MQM.LPALIB	P16S22	2417	5		US02
SYS1.MQM.LPALIB	P16S22	2417	5		US03
SYS1.MQM.LPALIB	P16S32	2106	5		US01
SYS1.MQM.LPALIB	P16S32	2106	5		US02
SYS1.MQM.LPALIB	P16S32	2106	5		US03
SYS1.MQM.LPALIB	P17S12	6130	5		AU01
SYS1.MQM.LPALIB	P17S12	6130	5		AU02
SYS1.MQM.LPALIB	P17S22	8659	5		AU01
SYS1.MQM.LPALIB	P17S22	8659	5		AU02
SYS1.MQM.LPALIB	P17S32	6224	5		AU01

Product Libraries Classifications

HCL Z Asset Optimizer
ZAOREP4

Product Libraries Parameters

Library search criteria: ☐ Case sensitive

Volume search criteria:

Vendor:
- Broadcom Inc.
- Cincom Systems, Inc.
- Cole Software
- Compuware Corporation
- Dovetailed Technologies
- eFunds International Ltd
- FIS
- IBM

Product Release:
- IBM - IBM DB2 Query Management Facility for z/OS
- IBM - IBM Debug for z/OS
- IBM - IBM Debug Tool for z/OS
- IBM - IBM Developer Common
- IBM - IBM Developer for System z
- IBM - IBM Explorer for z/OS
- IBM - IBM Library for REXX on zSeries
- IBM - IBM MQ for z/OS

Exclude Unknown Releases: ☐

Show Only Linklisted: ☐

Show by Classification: ☑

Class:
- All Classes
- Development

Result row limit: 5000

Repository:
- All Repositories
- ZAOREP3
- ZAOREP4

Output format: Browser

Submit

Product Libraries Classifications

HCL Z Asset Optimizer
ZAOREP4

Product Libraries

Vendor	Product Release Name	Product Release Option	Release	PID	FMID	Asset Version	Library	Class	System	Volume	APF	Linklist	Type	Product Modules	Library Modules	Last Used
IBM	IBM MQ for z/OS	BASE IPL	9.1.0	5655-MQ9	HMS9100	V9	SYS1.MQM.LPALIB	Development	US01	MWAS12				3	5	
IBM	IBM MQ for z/OS	BASE IPL	9.1.0	5655-MQ9	HMS9100	V9	SYS1.MQM.LPALIB	Development	US02	MWAS12				3	5	
IBM	IBM MQ for z/OS	BASE IPL	9.1.0	5655-MQ9	HMS9100	V9	SYS1.MQM.LPALIB	Development	US03	MWAS12				3	5	
IBM	IBM MQ for z/OS	ENGLISH (LINK)	9.2.1	5655-MQ9	JMS9CD1	Non Asset	SYS1.MQM.LPALIB	Development	US01	MWAS12				2	5	2021-03
IBM	IBM MQ for z/OS	ENGLISH (LINK)	9.2.1	5655-MQ9	JMS9CD1	Non Asset	SYS1.MQM.LPALIB	Development	US02	MWAS12				2	5	
IBM	IBM MQ for z/OS	ENGLISH (LINK)	9.2.1	5655-MQ9	JMS9CD1	Non Asset	SYS1.MQM.LPALIB	Development	US03	MWAS12				2	5	

6 rows from database query - DB2 DEC3 12:22:20 2022-07-13

Product Use

Product Event/Use

Vendor	Product	Feature	Release	PID	FMID	System	Asset Version	Month / Events			
								2019-06	2020-04	2020-07	2020-08
IBM	DB2	BASE	10.1.0 (1108)	5605-DB2	HDBAA10	OMU3	V10		18		
			11.1.0 (1709)	5615-DB2	HDBBB10	OMU2	V11				472
						OMU3	V11	552	3744	7973	2345
			12.1.0	5650-DB2	HIZCC10	OMU2	V12				734
						OMU3	V12		8445	12250	2841
		IMS Attach	10.1.0		HIYAA10	OMU3	Non Asset		36		
		IRLM	2.3.0 (1712)		HIR2230	OMU2	Non Asset				6
						OMU3	Non Asset	9	45	117	30
		ODBC (BASE)	11.1.0 (1709)		JDBBB17	OMU2	Non Asset				1
						OMU3	Non Asset	5			

18 rows from database query - DB2 DEC3 11:25:25 2020-09-24

```
/disc/product_use_month
metric                = EVENT
```

Vendor	Product	Feature	Release	PID	FMID	System	Asset Version	Month / Product Use			
								2019-06	2020-04	2020-07	2020-08
IBM	DB2	BASE	10.1.0 (1108)	5605-DB2	HDBAA10	OMU3	V10		2		
			11.1.0 (1709)	5615-DB2	HDBBB10	OMU2	V11				1
						OMU3	V11	0	7	17	5
			12.1.0	5650-DB2	HIZCC10	OMU2	V12				1
						OMU3	V12		15	21	7
		IMS Attach	10.1.0		HIYAA10	OMU3	Non Asset		2		
		IRLM	2.3.0 (1712)		HIR2230	OMU2	Non Asset				2
						OMU3	Non Asset	0	14	38	10
		ODBC (BASE)	11.1.0 (1709)		JDBBB17	OMU2	Non Asset				1
						OMU3	Non Asset	0			

18 rows from database query - DB2 DEC3 11:26:19 2020-09-24

```
/disc/product_use_month
metric                = PRDUSE
```

Value Unit Edition Support

Define VUE Products

HCL Z Asset Optimizer
ZAOREP4

Define VUE Product

Define VUE product/s to be displayed instead of the default product name/s

Action ⓘ: ◉Add ○Remove

Product Name - Version Name ⓘ:

- CICS TS for z/OS -CICS TS for z/OS-5655-Y04-5722-DFJ
- DB2 -DB2 12 for z/OS-5650-DB2-5770-AF3
- DB2 -DB2 11 for z/OS-5615-DB2-5697-P43
- Enterprise COBOL -Enterprise COBOL for z/OS V6-5655-EC6-5697-V61
- Enterprise COBOL -Enterprise COBOL for z/OS V5-5655-W32-5697-ECV
- Enterprise PL/I -Enterprise PL/I for z/OS-5655-PL5-5655-EPL
- IBM MQ Advanced for z/OS -IBM MQ Advanced for z/OS V9-5655-AV9-5655-AV1
- IMS Database Mgr V14 -DM-5635-A05-5655-DSE
- IMS DB Mgr V15 -DB-5635-A06-5655-DS5
- IMS Transaction Mgr V14 -ETO-5635-A05-5655-TM3
- IMS Transaction Mgr V14 -TM-5635-A05-5655-TM3
- IMS TM V15 -ETO-5635-A06-5655-TM4

Repository ⓘ: ZAOREP4

Submit

Product Name	FEATURE_NAME	VUPID
Enterprise COBOL	Enterprise COBOL for z/OS V6	5697-V61
Enterprise COBOL		5697-V61

Product Inventory VUE Products

Product with non VUE PID

HCL Z Asset Optimizer
MULTIREP: ZAOREP5

Product Inventory

Vendor	Product	Version	PID	S&S PID	Feature	EID	Discovered Installed	Annotation	Systems Installed	Last Used	Systems Used	Machines Used
IBM	Enterprise COBOL	V4	5655-S71		COBOL V4	S014DVZ	2020-04-01		2		0	0
IBM	Enterprise COBOL	V6	5655-EC6		Enterprise COBOL for z/OS V6	S017RBR	2020-04-01		5		0	0

2 rows from database query - DB2 DEC3 17:13:23 2022-07-14

/asset/product_inventory

Product with VUE PID

HCL Z Asset Optimizer
MULTIREP: ZAOREP5

Product Inventory

Vendor	Product	Version	PID	S&S PID	Feature	EID	Discovered Installed	Annotation	Systems Installed	Last Used	Systems Used	Machines Used
IBM	Enterprise COBOL	V4	5655-S71		COBOL V4	S014DVZ	2020-04-01		2		0	0
IBM	Enterprise COBOL	V6	5697-V61	5697-ECS	Enterprise COBOL for z/OS V6	S017Z7K	2020-04-01		5		0	0

2 rows from database query - DB2 DEC3 18:07:35 2022-07-14

/asset/product_inventory

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