



Compliance Engine for SAP
EH&S

October 29, 2024 – On site
meeting and demonstration

Agenda

(8:30 to 12:00)

Introductions (10 min)

General Partnership overview (10 min)

Sphera Managed Regulatory Content (10 min)

Compliance Engine for SAP EH&S Overview (10 min)

Compliance Engine for SAP EH&S Demonstration (90 min)

Document Storage and IA Productivity Tools (30 min)

Solution Deployment and Transition Activities (30 min)

Next steps and Conclusion

Sphera / NewMarket Partnership



LCAT Calculator
10/22/2021 – 10/21/2024

**SpheraCloud
Advanced Risk
Assessment**
1/27/2022 – 1/26/2027

Intelligent Authoring/MRC
10/1/1998 – 9/30/2026

Sphera's Managed Regulatory Content

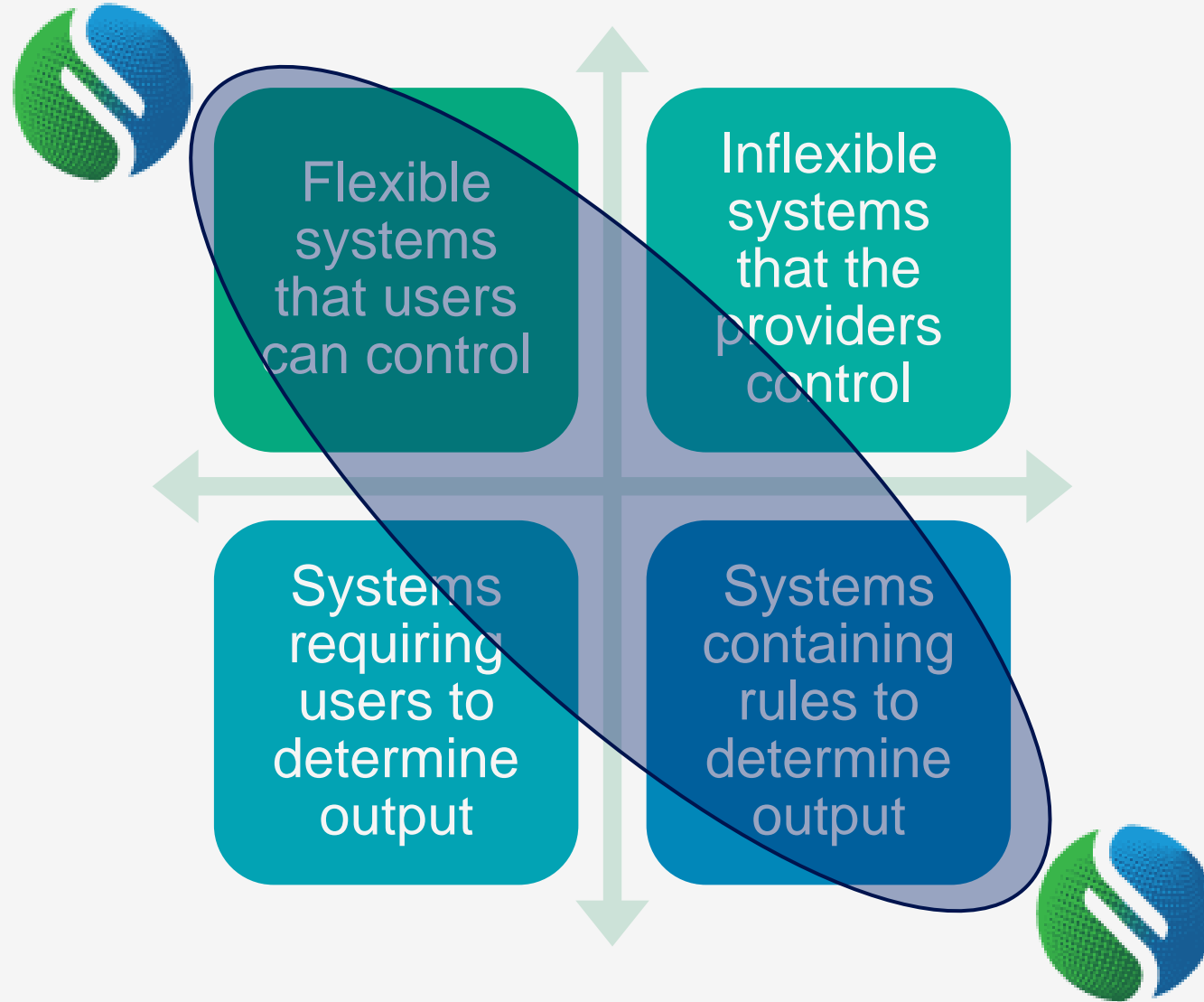
A relentless approach to ensuring your data is **accurate** and **available**.



We build the engine so YOU can drive
Tools that give control to the user



Decision Making



Who is in charge here?

Functionality which gives the power back to the user:

- Settings Editor

- Allows clients to make decisions where there are grey areas in the regulation
- Gives the ability to create new countries or regions that may be needed
- Allows additional HNOCs to be entered when necessary

The screenshot shows the 'Settings Editor' application window. The title bar includes 'Settings Editor', 'File', 'Edit', and 'Help'. Below the title bar are buttons for 'Save' and 'Generate Report'. The main interface is divided into three sections:

- Navigation Tree (Left):** A tree view with nodes for Home, Search, GHS (expanded), and various regulatory categories like Physical, Health, Environment, etc. The 'GHS' node is selected, and 'General' is the active sub-section.
- Main Content Area (Center):** Titled 'GHS > General', it features a radio button for 'UN GHS revision number for precautionary statements'. Below this is a table with columns for 'Country' and 'UN GHS revision number'. The table lists various countries and regions with their corresponding revision numbers.
- Right-Hand Panel:** Contains three sections: 'UN GHS revision number for precautionary statements' with explanatory text, a 'Comments' section with a text input field and a 'View Change History' button, and 'Default Values' with a small table showing default revision numbers for AU and BR.

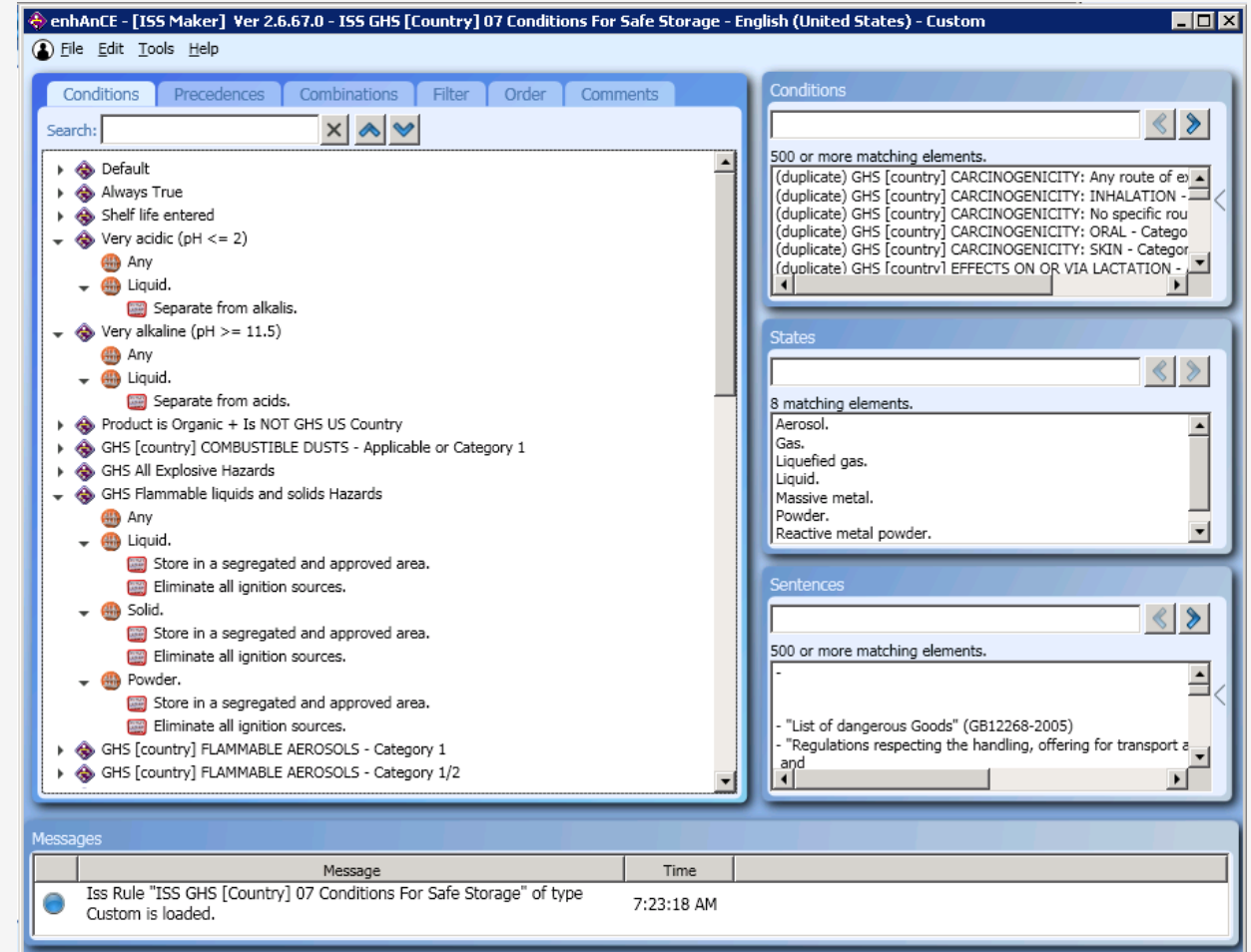
Country	UN GHS revision number
Australia - AU	2, 3
Brazil - BR	4
Canada - CA	5, 6
China - CN	4
Eurasian Economic Union - EAEU	4
Europe - EU	5, 6
Indonesia - ID	4
Japan - JP	4
Republic of Korea - KR	4
Mexico - MX	5, 6
Malaysia - MY	2, 3
Singapore - SG	4
Thailand - TH	2, 3
Turkey - TR	2, 3
Taiwan - TW	4
United Nations - UN	5, 6
Viet Nam - VN	2, 3
United States of America - US	4
User-defined region 1 [UDR1]	5, 6

Who is in charge here?

Functionality which gives the power back to the user:

- EnhAnCE Tool

- The information and warnings in Sections 4 – 13 are not prescribed in the regulation.
- The EnhAnCE tool allows clients to tailor this information to their specific needs
 - Clients can make changes on the sentence to output as well as the conditions that will cause sentences to be output



Compliance Engine (CE) for SAP EH&S

Compliance Engine: SAP Certified Solution & Silver Partner

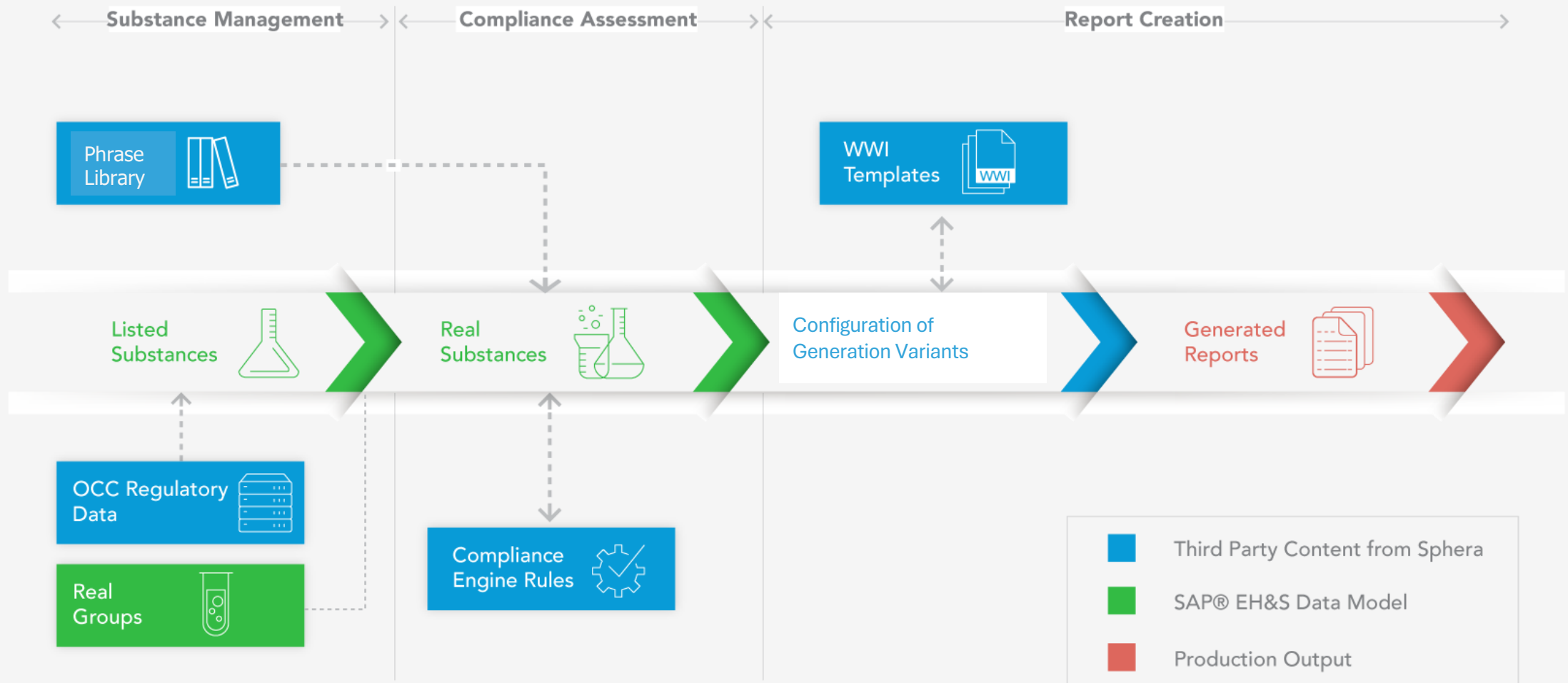


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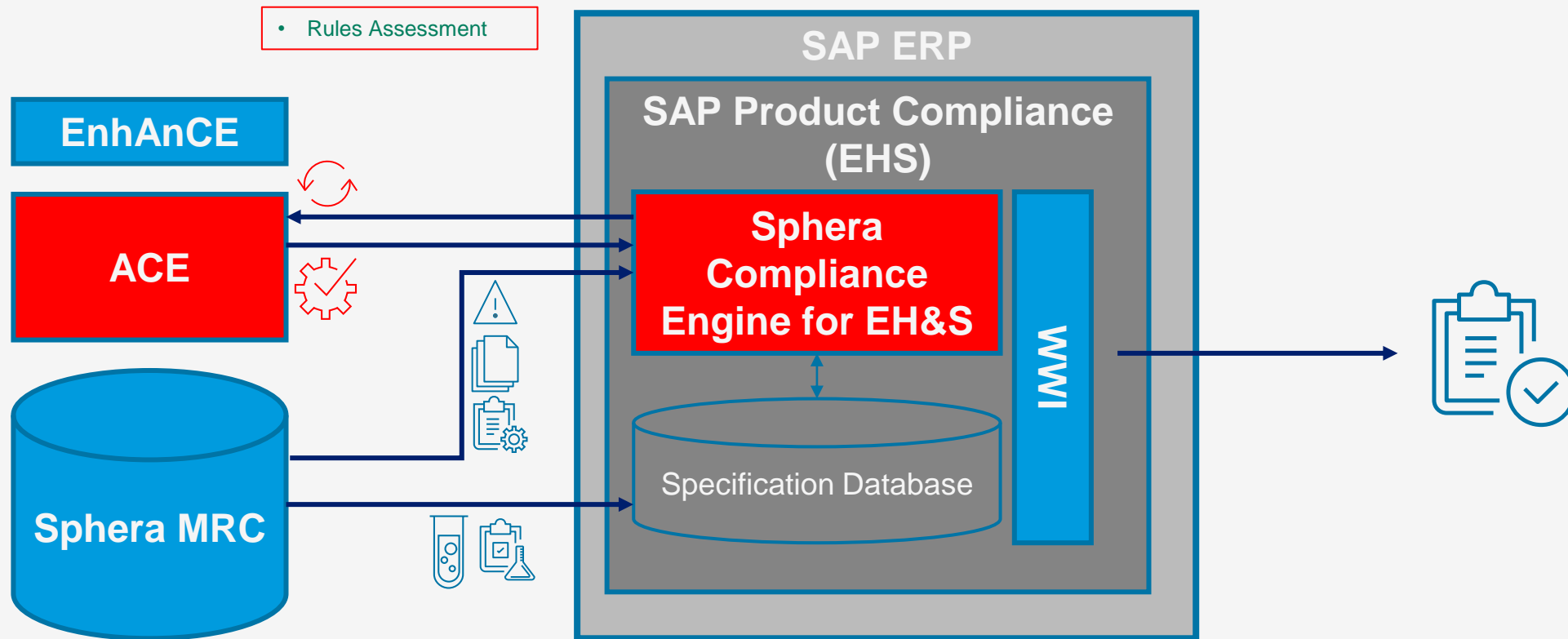
SAP[®] Certified
Integration with SAP NetWeaver[®]

Getting the Data into Your System

SAP® Product Safety Model with Sphera's Compliance Suite for EH&S



Sphera Integration with SAP for SDS Authoring



- Rules Assessment

- Rules, Phrases, Pictograms and Forms
- OCC Substance Information

- Run Rules with ACE
- Save results to the Property Tree
- Rule behavior can be tailored via Enhance

Demonstration

Differentiators – CE vs. competitors

1. Run rules and show the dashboard results before being committed (background / online / scheduled background)
- 2. Enhance – Settings editor – No dev required**
- 3. Enhance – ISS GHS sentence output control – No dev required**
4. Audit – (Transport / GHS)
5. PCN submission via Opesus partnership

Key Benefits

1. Rapid deployment of an SAP® EH&S environment by leveraging a pre-packaged content delivery mechanism
2. Reduces effort required to keep SAP® EH&S regulatory information current
3. Minimizes risk of non-compliance to global, regional regulations and associated violation costs
4. Rapidly and accurately generates compliant regulatory documentation and increases EH&S productivity
5. Shifts the burden of integrating and maintaining regulatory content to Sphera's network of experts
6. Conceptual similarities with IA making transition to CE more seamless

Questions?



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Back-up slides

IA vs CE - Similarities

Authoring Component

File Options Database View Tools Help

Search by: Product name.English (US)

Mode: Sort (Fast)

Types: Active Product, Revision 1, Revision 2, Inactive Product, Pure Product, Mixture, ???

Number of matching elements: 35
Number of selected elements: 0

Current EIID: 3v:q5i0:7rb

Product: Add... Edit... Copy... Delete View... Properties...

Export Local Chemdata Import...

PIDS: Add/Edit... Copy... Delete View...

Query: None / Folder: None

Searching for products/specifications

Edit Specification: Hit List (7 Hits)

Specification	Desc. specific. type	Index number acc. to EEC/67/548	EINECS number	UN number	Product name	IUPAC name
BC_ETHANOL	Listed substance	603-002-00-5	200-578-6		Ethanol	ethanol (NAM)
ETHANOL	Listed substance					
LUBBETH01	Listed substance					
TESTMETHAN01	Listed substance	603-001-00-X	200-659-6			methanol (NA)
TESTMETHAN02	Real substance				TEST pour Meth	
TESTMETHANOL	Real substance				To test methano	
YJTESTMETH	Real substance				YJ test methano	

Editing products or Specifications

Product Editor - Ethanol - Main

File Settings Product Screens Language Status... DB Link Tools Help

Screen Selection

General - Product Description

Chemical Name: ethanol

Commercial Names: e.g. ATR777 Alcohol solution

Synonym: ethyl alcohol; Denatured Alcohol; ALCOHOL; Ethyl alco

CAS #: 64-17-5 Code:

CN-Code: 2207 10 00 RTECS #:

Uses

Product Use: Consumer Industrial Professional

Agriculture:

Coating: Catalyst for epoxy resins. Dispersing agent in the paint

Consumer:

Environment:

Explosive:

Industry:

Metallurgy:

Mine:

Paper:

Petrochemistry:

Pharmacy:

Specific uses:

Textile:

Other: MANUFACTURE OF ACETALDEHYDE AND OTHER C

Extra Search Fields

1) 2)

Specification Edit Goto Extras Utilities(M) Environment System Help

Specification Header Data

Export Data Compliance Check for RM

Listed substance BC_ETHANOL 200-578-6 603-002-00-5

03.10.2011 Ethanol

Specification Header Restrictions Identifiers References Material Assignments Status Relationships

Sp	In	RL	US	ID Categ.	ID Type	L	Sort	Identifier
		1	1	FRM	SUM		1	C2H6O
		1	1	NAM	HIS	SL	1	ETANOL, RAZTOPINA
		1	1	NAM	HIS	SL	2	ETILALKOHOL, RAZTOPINA
		1	1	NAM	HIS	SL	3	ETANOL
		1	1	NAM	HIS	SL	4	ETILALKOHOL
		1	1	NAM	HIS	ET	1	ETANOOLI, LAHUS
		1	1	NAM	HIS	ET	2	ETÜÜLALKOHOLI, LAHUS
		1	1	NAM	HIS	ET	3	ETANOO
		1	1	NAM	HIS	ET	4	ETÜÜLALKOHOL
		1	1	NAM	HIS	CS	1	ETHANOL, ROZTOK
		1	1	NAM	HIS	CS	2	ETHYLALKOHOL, ROZTOK
		1	1	NAM	HIS	CS	3	ETHANOL
		1	1	NAM	HIS	CS	4	ETHYLALKOHOL
		1	1	NAM	HIS	DE	1	ETHANOL, LÖSUNG
		1	1	NAM	HIS	DE	2	ETHYLALKOHOL, LÖSUNG
		1	1	NAM	HIS	DE	3	ETHANOL
		1	1	NAM	HIS	DE	4	ETHYLALKOHOL
		1	1	NAM	HIS	EN	1	ETHANOL SOLUTION
		1	1	NAM	HIS	EN	2	ETHYLALCOHOL SOLUTION
		1	1	NAM	HIS	EN	3	ETHANOL
		1	1	NAM	HIS	EN	4	ETHYLALCOHOL
		1	1	NAM	HIS	FR	1	ETHANOL EN SOLUTION
		1	1	NAM	HIS	FR	2	ALCOOL ETHYLIQUE EN SOLUTION
		1	1	NAM	HIS	FR	3	ETHANOL

Property Tree

- BC_ETHANOL 200-578-6
- Atrion CE Property Tree v4.1.0 CE41
 - 1. Ident. of substance/preparation
 - OECD and company information
 - Atrion Supplier Information
 - Atrion Other Informations
 - Atrion Distributor Information
 - Atrion Importer Information
 - Atrion Legal Entity
 - Type of substance
 - Use of Substance
 - MSDS requirement
 - Label (hazardous substance)
 - Atrion Reach Identity
 - Atrion Reach Screening Indicators
 - Atrion Reach Identified Uses
 - Atrion Reach Use Advised Against
 - Standard Component Type
 - 2. Hazards identification
 - 3. Composition/information on ingredients
 - 4. First aid measures
 - 5. Fire fighting measures
 - 6. Accidental release measures
 - 7. Handling and storage
 - 8. Exposure controls/personal
 - 9. Physical/chemical properties

Entry 1 / 187

Loading substance information

Field by Field Update

Product Information

Name: Ethanol

Extension: IA Data Link

View

All fields Fields of current screen

Select the fields to update or overwrite:

Field Name	Data
Is the Product a mixture?	No
WHMIS Classification	B2 - Flammable liquid, D2B - Toxic, chronic
[CA] WHMIS Classification Origin ...	Skin or Eye Irritation (1% cutoff)
WHMIS disclosure concentration	0.1
IDLH Units	ppm
IDLH Value	3300
California cancer list	Yes
California Prop. 65	Yes
NFPA flammability index	3
NFPA health index	2
NFPA reactivity index	0
SARA 311/312 Distribution - Che...	Yes
SARA Hazardous Chemicals	Yes
SARA 311/312 Hazards	Immediate (Acute) Health Hazard, Delayed (Chr...
Chemical formula	C2-H6-O
Color	Colorless. Clear.
Main organic functional group	Alcohol
Odor	Characteristic.
Physical state	Liquid
Aquatic Ecotoxicity	LC50 Fish 10000000-11500000 ug/L

EHS Open Content Connector - dimethylamine 124-40-3

dimethylamine 124-40-3

Substances	Relevant Fl...	Load Flag	Timestamp...	Other Content from F
dimethylamine 124-40-3				
Canada DSL name	E	ZCA_DSL	Methanamin...	
EINECS number	X	ZEU_EINE...	204-697-4	
EINECS name	E	ZEU_EINE...	dimethylami...	
EINECS name	K	ZEU_EINE...	dimethylamin	
EINECS name	D	ZEU_EINE...	Dimethylamin	
EINECS name	G	ZEU_EINE...	διμεθυλαμίν	
EINECS name	S	ZEU_EINE...	dimetilamina	
EINECS name	F	ZEU_EINE...	dimethylami...	
EINECS name	I	ZEU_EINE...	dimetilamina	
EINECS name	N	ZEU_EINE...	dimethylami...	
EINECS name	P	ZEU_EINE...	dimetilamina	
Japan ENCS name	E	ZJP_ENCS	Dimethylami... METHANAMINE, I	
Japan ENCS name	J	ZJP_ENCS	ジメチルアミン	
Totals formula		Z_FORM	(CH3)2NH	
Synonym	E	Z_SYN	dimethylami...	
Synonym	K	Z_SYN	dimethylamin	
Synonym	D	Z_SYN	Dimethylamin	
Synonym	G	Z_SYN	διμεθυλαμίν	
Synonym	S	Z_SYN	dimetilamina	
Synonym	F	Z_SYN	dimethylami...	
Synonym	I	Z_SYN	dimetilamina	
Synonym	N	Z_SYN	dimethylami...	
Synonym	P	Z_SYN	dimetilamina	
TSCA name	E	ZUS_TSCA	Methanamin...	

Notification status	OCC	EH&S
Unique ID (as freetext)	ATRIONNS:R1485269	ATRIONNS:R1485269
Substance ID	124-40-3	
Name	dimethylamine	
CAS Number	124-40-3	
Relevant Flag		
Load Flag	1	
Timestamp of last change of Provi...	20101105	
Assessment		
Source	ZJP_ENCS	ZJP_ENCS
Regulatory list	ZJP_ENCS	ZJP_ENCS
Notification	Listed	Listed
Additional information		
List notification	Listed	Listed
Notification number	(2)-134	(2)-134
Notification basis	Japan_ENCS - Existing ...	Japan_ENCS - Existing ...
Revision	1974-04-01	1974-04-01
Active Flag	X	
Name on list	E 0001 Dimethylamine_...	0001 Dimethylamine_...
Remarks		
Area	REG_WORLD	REG_WORLD
Usage	PUBLIC REG_WORLD	PUBLIC REG_WORLD

Document Storage Overview



What is SpheraCloud Document Storage?

A SaaS based software that:

- ✓ stores high volumes of Product Documents (SDSs, Labels, CoAs, etc.);
- ✓ allows for employee access and;
- ✓ facilitates easy distribution to customers.

Document Storage Benefits

Integrated to SpheraCloud

- Navigate seamlessly between SpheraCloud apps through a single login (SCCM will join SpheraCloud in the future)*
- Simultaneous access to authored and supplier SDSs through a single search (Future)*

Automatically Distribute Documents & Information

- Easily search and retrieve current product documents and document history
- Save time and resources by automating distribution of documents to your customers, both actively and passively

Reduce IT Maintenance

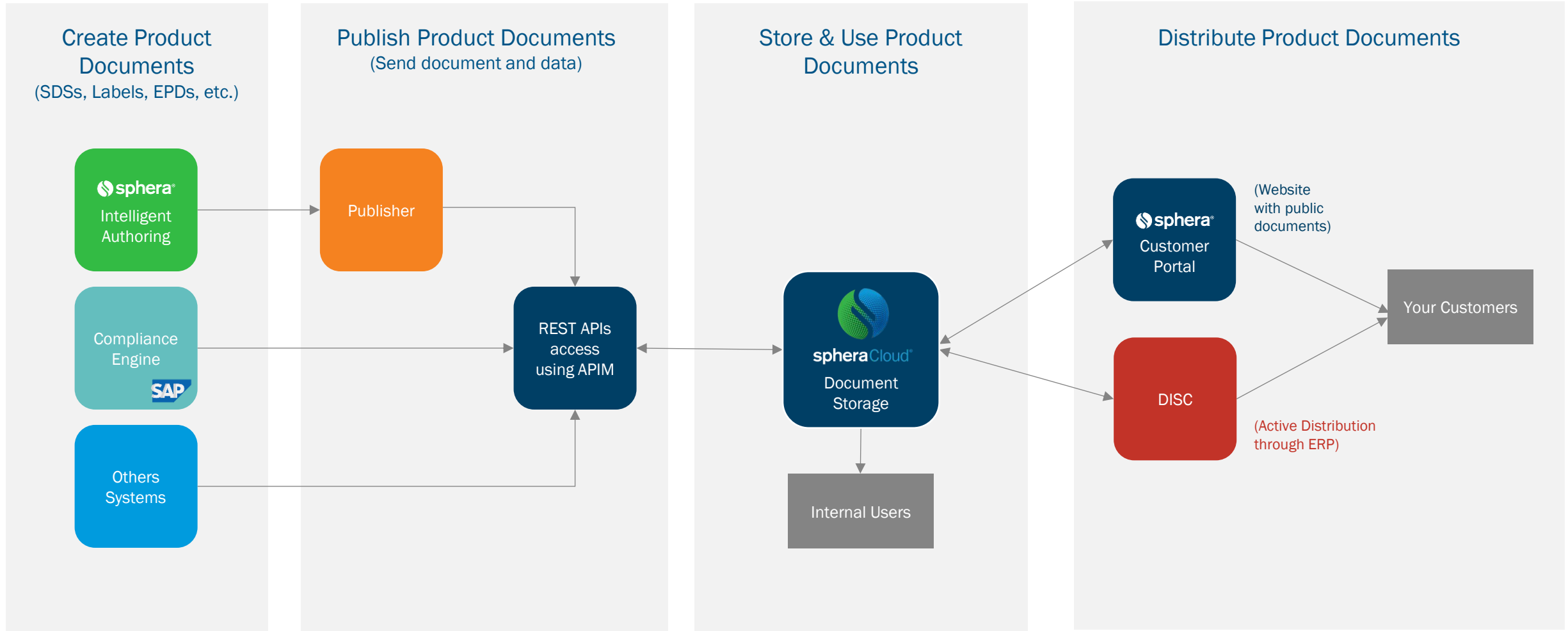
- Reduces IT resources needed because it is a fully SaaS product*
- Easily integrate material and document data into other systems*

Easy Publishing of Documents

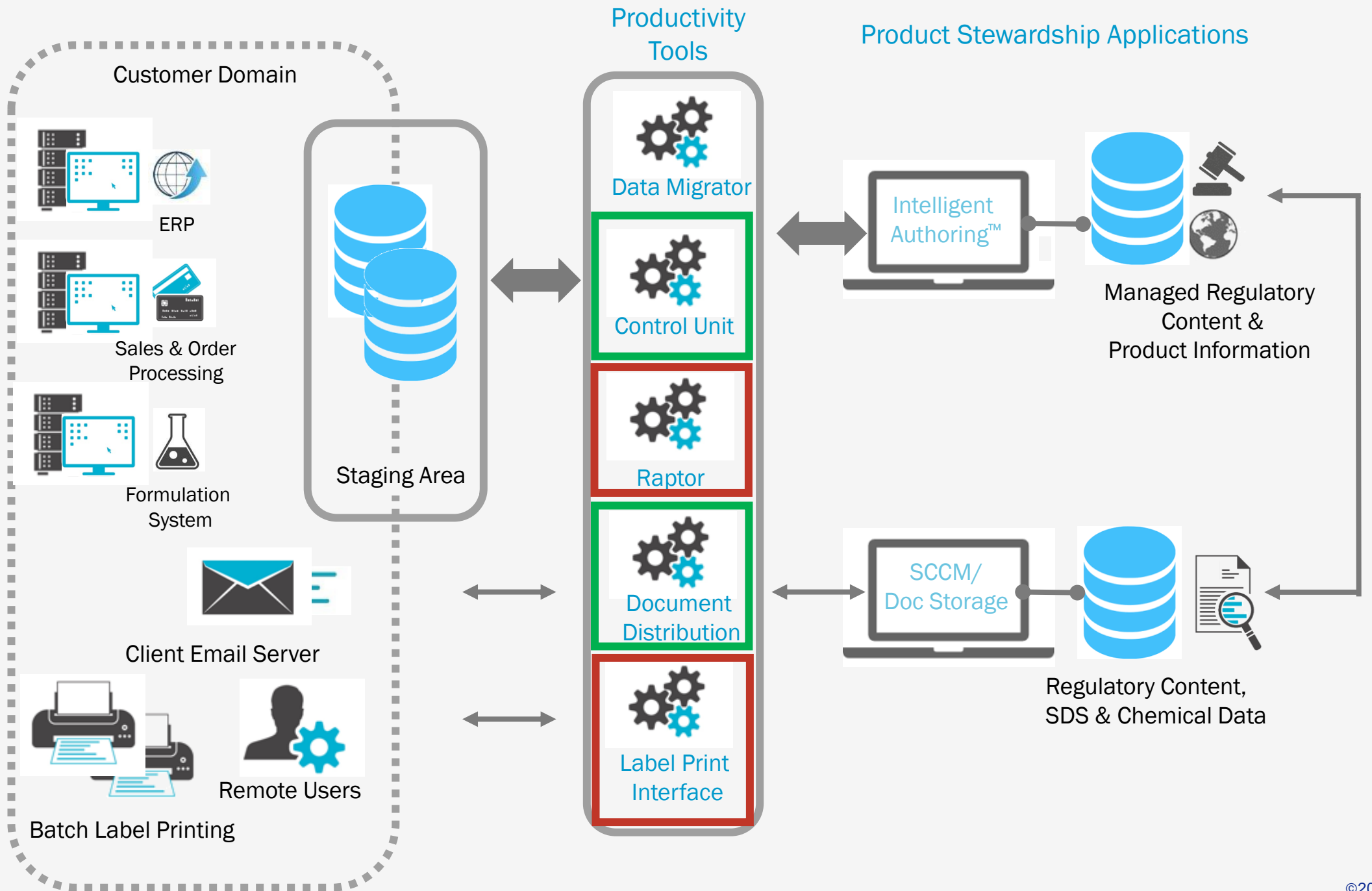
- Seamlessly publish product documents from Intelligent Authoring using our built-in integration
- Utilize APIs to publish documents from other source systems*
- Support for a high volume of documents/materials



Document Storage Overview

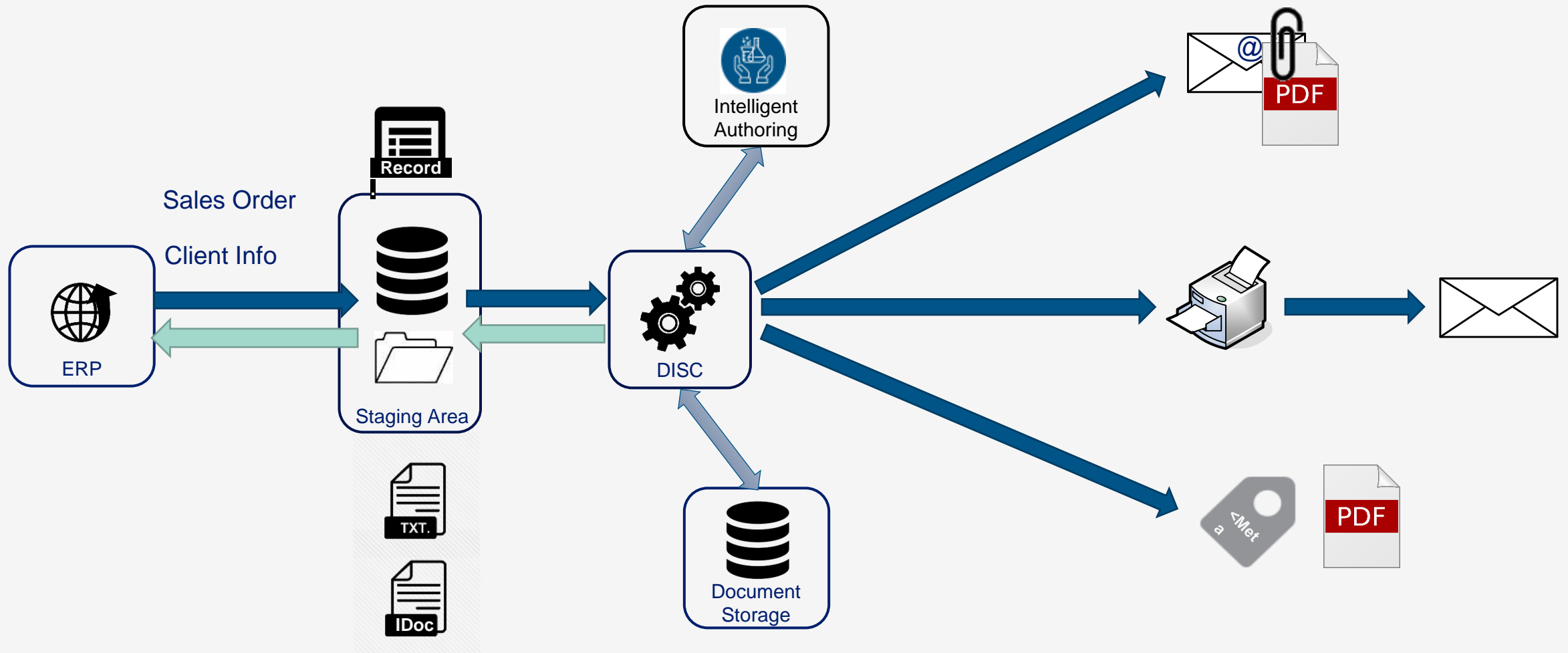


Productivity Suite Overview



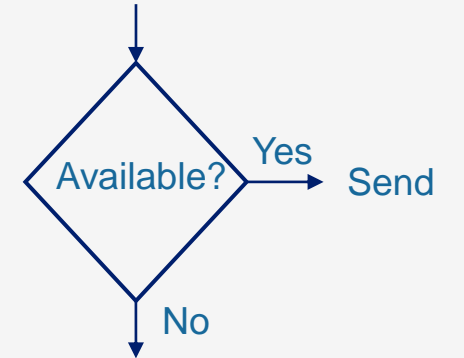
Document Distribution (DISC)

Functional Overview – DISC

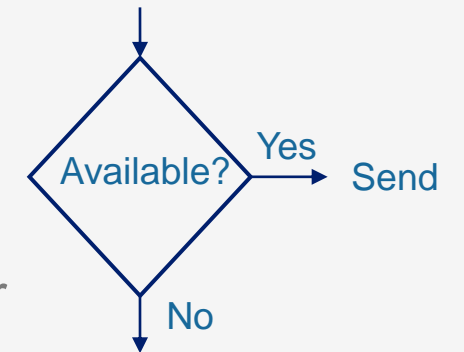


- Distribution to customers, initiated by sales order.
- Re-distribution to customers, based on document updates.
- Possibility to retrieve documents from Intelligent Authoring and Comply Plus.
- Document fallback functionality (4 levels) for alternative documents.
- Possibility to recover a specific distribution run (example when printer problems).
- Advanced configuration options. For example:
 - Restrict to most current SDS versions, updates.
 - Can send for only certain types of updates (e.g., major changes or minor changes).
 - Periodic updates (every nth month).
 - Restrict distribution based on shipping date or document validation date.
 - Notification only – no documents.

Mexico (MX) SDS - Spanish



Mexico (MX) SDS - English



United States (US) SDS - English

Control Unit

Functional Overview – Control Unit

Purpose: Coordinates Data Migrator, Raptor and Atomus Functions

Control Unit Engine Monitor - Development

File Options Tools View Help

Requests Process Details

Request Status: Successful Requests Search Field: Max Requests: 50

Request Date: Friday, February 16, 2018 Search Value:

Requests Selected: 1

Requests: 3 of 3

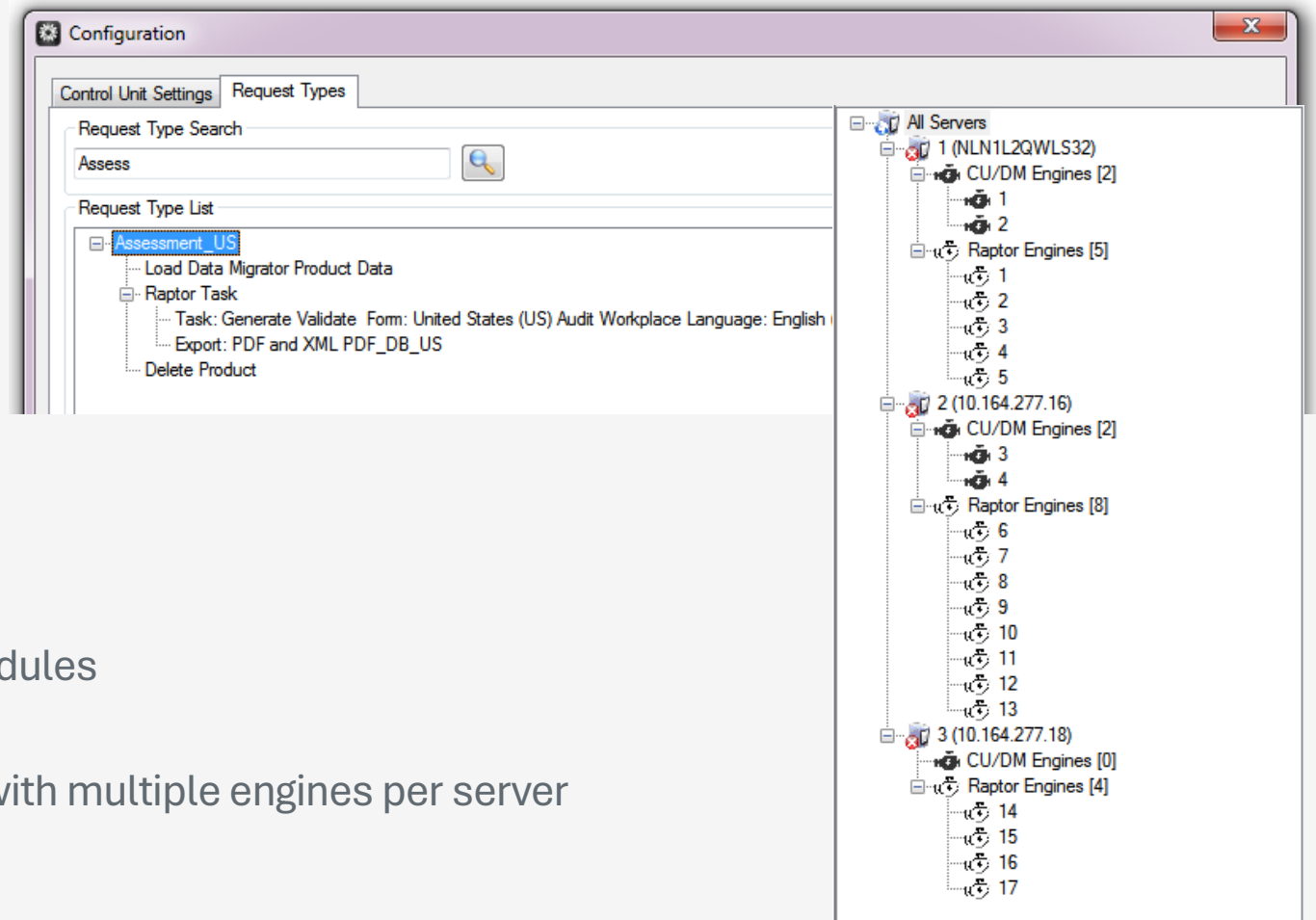
Request Time	Processed Time	Request Status	Product Code	Product Name	Request Type	Priority	IA Folder	Request ID	Meta Data
02/16/2018 10:42:06 AM	02/16/2018 10:43:05 AM	Complete	123445323	Hot Clean Converter Extra	Process_UK	2	NEW	4fb06874-80a5-4898-a5ab-7...	
02/12/2018 3:49:34 PM	02/12/2018 3:50:10 PM	Complete	TEST CU	TEST CU	Import	2		e78800e9fdab-4101-8878-a...	
12/04/2017 10:26:52 AM	12/04/2017 5:37:05 PM	Complete	TEST#	TEST#	Import	2		63e51ef4-df5a-476d-80cd-7...	

Request Details:

Status	Component	Command	Form	Language	DDI	Exports	Additional Co...
Complete	Data Migrator	Data Migrator Update					
Complete	Raptor	GENERATE(VALIDATE)(EXPORT(PDF Only))	Europe (EU) CEPE SDS REACH 2015/830 - United Kingdom	English (GB)		EXPORT(PDF Only)	IEPIC VPIC

Functional Overview – Control Unit

- Receives external requests such as:
 - Load Data
 - Generate/Validate/Publish Documents
 - Export Document and/or Data
 - Datalink and Transport Link updates
 - Product delete and copy commands
- Coordinates processing of requests
- Provides status updates
- Displays a dashboard for the connected modules
- Allows load balancing; on multiple servers with multiple engines per server



Label Printing Interface (LPI)

Functional Overview Oranjesingel 34 6511 NV Nijmegen The Netherlands

Powder coating special



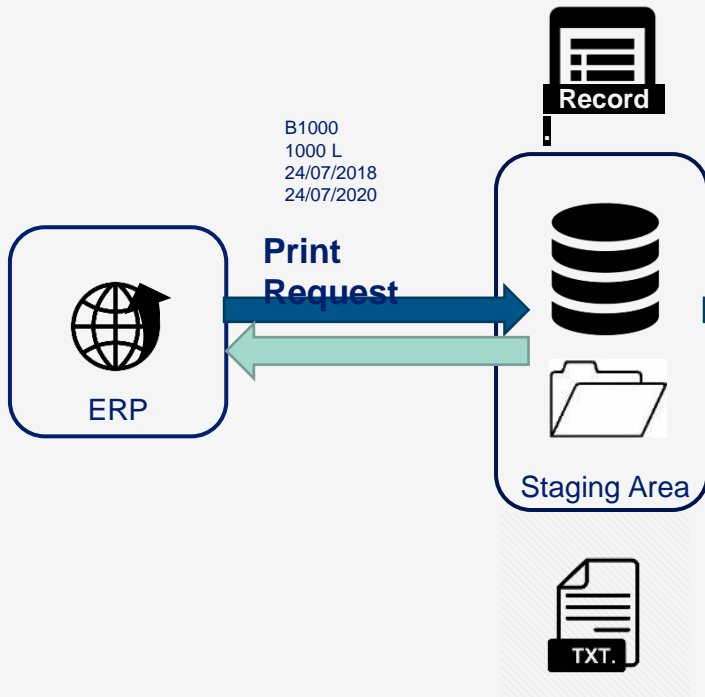
[en-US] Danger
Flammable liquid and vapor. Flammable solid. Toxic to aquatic life with long lasting effects.
Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion proof electrical, lighting and all material handling equipment. Avoid release to the environment. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Keep cool. Dispose of contents and container in accordance with all local, regional, national and international regulations.
90 percent of the mixture consists of component(s) of unknown toxicity.
Contains 90 % of components with unknown hazards to the aquatic environment

[fr-CA] Danger
Liquide et vapeurs inflammables. Matière solide inflammable. Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
Lire l'étiquette avant utilisation. Tenir hors de portée des enfants. En cas de consultation d'un médecin, garder à disposition le récipient ou l'étiquette. Porter des gants de protection. Éviter une protection oculaire ou faciale. Tenir à l'écart de la chaleur, des surfaces chaudes, des étincelles, des flammes nues et de toute autre source d'ignition. Ne pas fumer. Utiliser de l'équipement électrique, de ventilation, d'éclairage et de manutention antidéflagrant. Éviter le contact dans l'environnement. EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): Élever immédiatement tous les vêtements contaminés. Rincer la peau avec de l'eau ou doucher. Tenir au frais. Éliminer le contenu et le récipient conformément à toutes les réglementations locales, régionales, nationales et internationales.
90 pour cent du mélange comprend une ou des composantes de toxicité inconnue.
Contient 90 % de composantes comportant des dangers inconnus aux milieux aquatiques

[de-DE] Gefahr
Flüssigkeit und Dampf entzündbar. Entzündbarer Feststoff. Giftig für Wasserorganismen, mit langfristiger Wirkung.
Vor Gebrauch Kennzeichnung etкетten lesen. Darf nicht in die Hände von Kindern gelangen. Ist ärztliche Rat erforderlich, Verpackung oder Kennzeichnung etкетten bereithalten. Schutzhandschuhe tragen. Augenschutz oder Gesichtsschutz tragen. Von Hitze, heißen Oberflächen, Funken, offenen Flammen sowie anderen Zündquellenarten fernhalten. Nicht rauchen. Explosionsgeschützte elektrische Lüftung, Belüftungsgaräte und ausstrahlende explosionsgeschützte Arbeitsgeräte verwenden. Freisetzung in die Umwelt vermeiden. BEI BERÜHRUNG MIT DER HAUT (oder dem Haar): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen oder duschen. Kühl halten. Inhalt und Behälter in Übereinstimmung mit allen lokalen, regionalen, nationalen und internationalen Gesetzen entsorgen.
90 Prozent des Gemisches bestehen aus einem oder mehreren Bestandteilen unbekannter Toxizität.
Enthält 90 % Bestandteile mit unbekannter Gewässergiftwirkung

[es-ES] Peligro
Líquido y vapores inflamables. Sólido inflamable. Tóxico para los organismos acuáticos, con efectos nocivos duraderos.
Leer la etiqueta antes del uso. Mantener fuera del alcance de los niños. Si se necesita consultar a un médico, tener a la mano el recipiente o la etiqueta del producto. Usar guantes de protección. Usar protección para los ojos o la cara. Mantener alejado del calor, chispas, llamas al descubierto, superficies calientes y otras fuentes de ignición. No fumar. Todos los equipos eléctricos, de ventilación, de iluminación y para la manipulación de materiales, deberán antidéflagrantes. No desperdiciar en el medio ambiente. En caso de contacto con la piel (o el pelo): Quitar inmediatamente toda la ropa contaminada. Enjuagar la piel con agua o ducharse. Mantener fresco. Eliminar el contenido y recipiente conforme a todas las regulaciones locales, regionales, nacionales e internacionales.
90 por ciento de la mezcla contiene componentes de toxicidad desconocida.
Contiene 90 % de componentes con efectos nocivos para el medio ambiente acuático

Lot Number:
Contains
Manufacture date
Expiry date
Additional information
Store in a dry, cool and well-ventilated area.
Conserver dans un endroit sec, frais et bien ventilé.
Trocken, kühl und bei guter Durchlüftung lagern.
Conservar en un lugar seco, fresco y bien ventilado.



B1000
1000 L
24/07/2018
24/07/2020

Print
Request

Staging Area

TXT.

LPI

Functional Overview – Label Print Interface (LPI)

- Print compliant labels from multiple locations in multiple languages to multiple printers.
- Can be used in Manual, Semi-Automatic and fully automated (interface) modes.
- Retrieves relevant regulatory data from IA and business data from ERP and other data sources.
- Allows advanced configuration using scripting.
- UI in English, French, Dutch, German, Spanish, Portuguese, Italian and Chinese.
- Can merge several translations onto one label field for space management.
- Supports merge printing (Ability to send multiple label printouts in one spool file).
- Supports most common 1D and 2D barcode symbology.
 - **1D:** 39, 39C, 128A, 128B, 128C, 128 Auto, EAN128A, EAN128B, EAN128C, EAN128 Auto, EAN EAN13
 - **2D:** QR, Matrix, PDF417

[fr-CA] Effet cancérigène suspecté — preuves insuffisantes. Très toxique en cas d'ingestion. Conserver sous clef et hors de portée des enfants. Après contact avec la peau, se laver immédiatement et abondamment avec de l'eau et du savon. Porter un vêtement de protection et des gants appropriés. En cas d'accident ou de malaise, consulter immédiatement un médecin (si possible, lui montrer l'étiquette).

[nl-NL] Carcinogene effecten zijn niet uitgesloten. Zeer vergiftig bij opname door de mond. Achter slot en buiten bereik van kinderen bewaren. Na aanraking met de huid onmiddellijk wassen met veel water en zeep. Draag geschikte handschoenen en beschermende kleding. Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen).

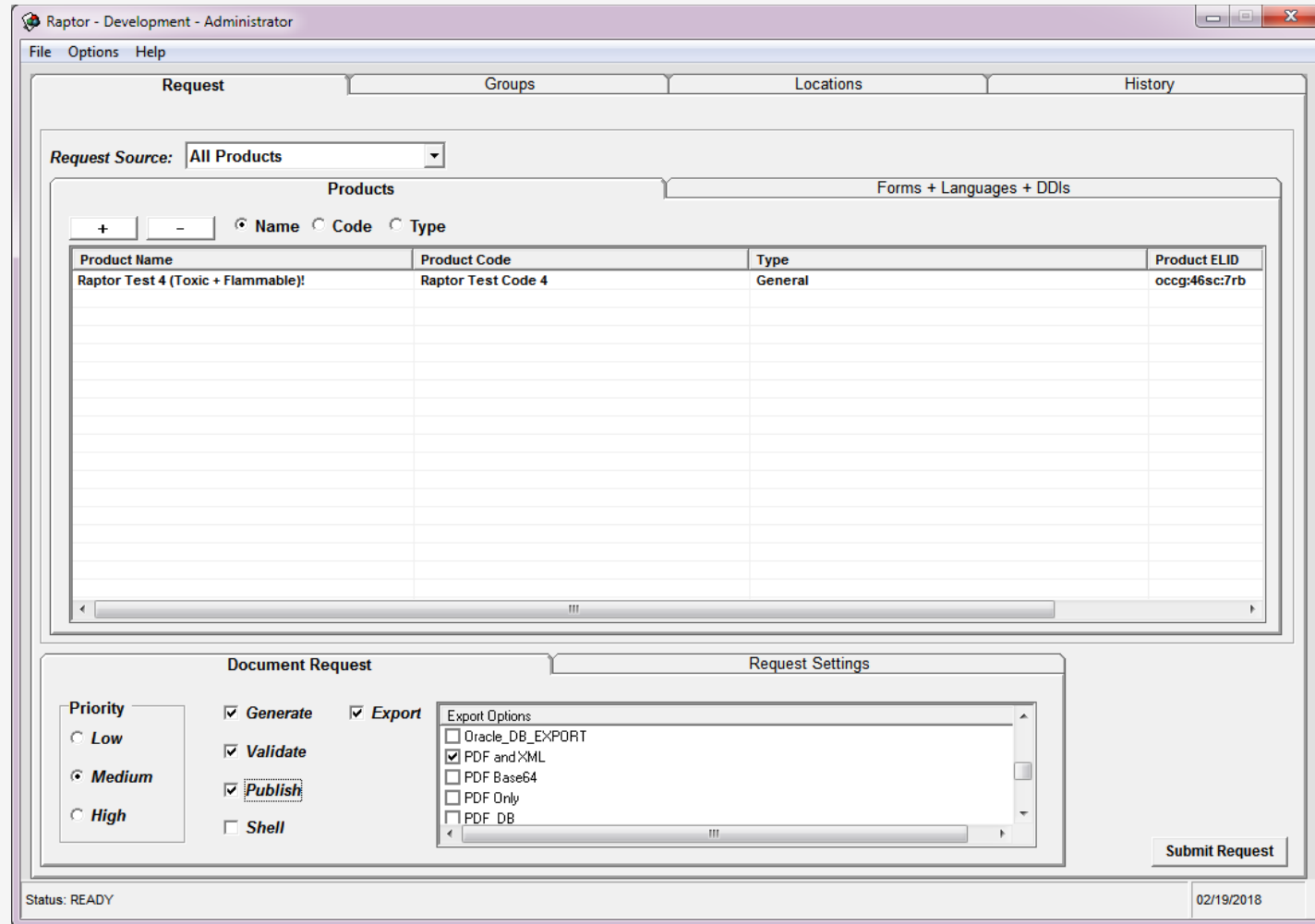
[zh-CHT] 致癌影響的有限證據。食入劇毒。上鎖保管並避免兒童接觸。若與皮膚接觸，立即用大量的肥皂水沖洗。穿適當的防護服，戴適當的防護手套。發生事故或感覺不適時，立即就醫治療(如有可能，出示該物品的標籤)。

[el-GR] Υπόπτο καρκινογένεσης. Πολύ τοξικό σε περίπτωση καταπόσεως. Φυλάξτε το κλειδωμένο και μακριά από παιδιά. Σε περίπτωση επαφής με το δέρμα, πλυθείτε αμέσως με άφθονο σαπούνι και νερό. Φοράτε κατάλληλη προστατευτική ενδυμασία και γάντια. Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την ετικέτα αν είναι δυνατό).

Raptor

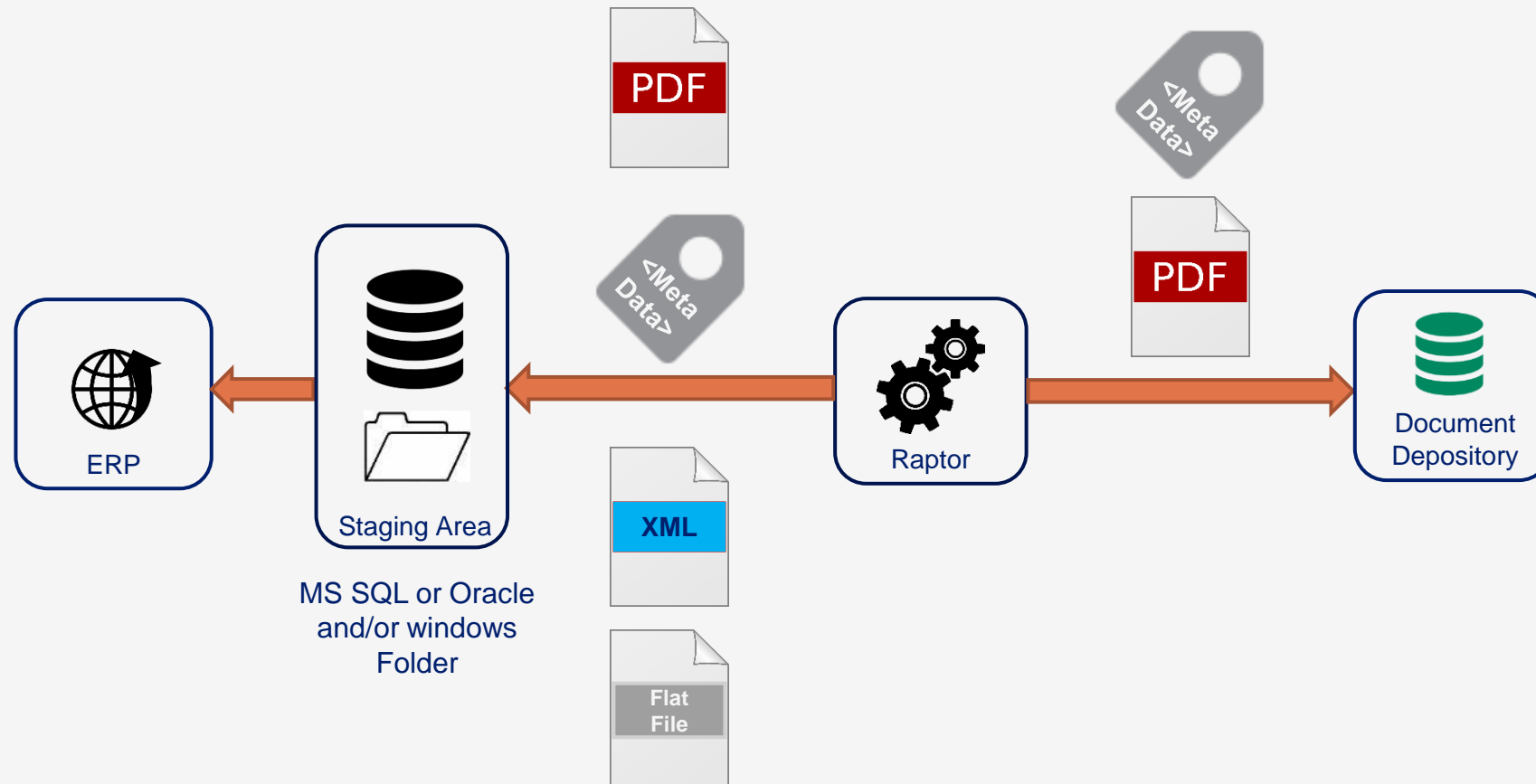
Functional Overview - Raptor

Purpose: Generate, Validate, Publish, Export Documents and Metadata



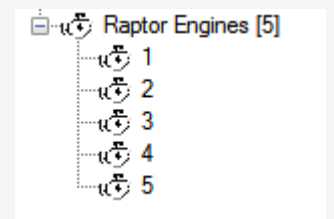
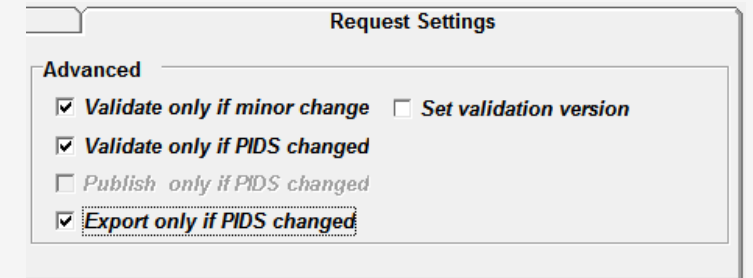
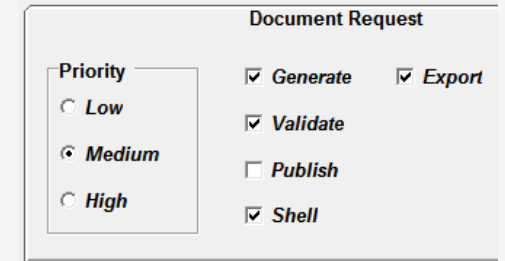
Functional Overview - Raptor

- Exports data to
 - MS SQL/Oracle databases and/or Folder
 - Various file formats (fixed length, delimited, XML)



Functional Overview - Raptor

- Supports priority and FIFO processing
- Stores often used form, language combinations to allow easy processing
- Allows smart processing (only process documents that have changed)
- Flexible operation
 - Manual mode (via GUI)
 - Automated mode (via task scheduler)
 - Interface mode (via control unit)
- Allows multiple engines to improve average processing time (high volume scenarios)



Atomus

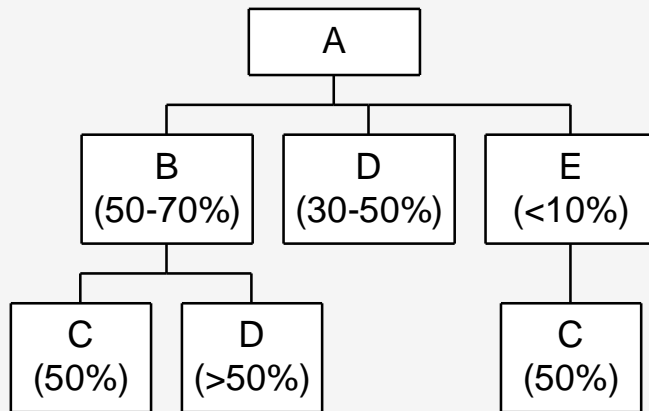
Functional Overview - Atomus

Purpose: Enhances and Optimizes the Search and Retrieval of Composition Data

- Very fast method of retrieving product composition data from Intelligent Authoring
- Used in interfaces that integrate Intelligent Authoring with ERP systems
 - As part of the Productivity Suite used to allow re-generation of all products containing updated ingredient.
- Provides several composition and where used reports
- Supports export to comma separated file which can be opened in Excel

Functional Overview - Atomus

- Example Composition Breakdown Report (lowest level composition)



Decomposition method	Main Product	Levels	Name	CAS	Parents	Has Composition	In parent Entered	In parent Calculated	In this branch Calculated	In final product Calculated	ELID
Default	A	1	A			Yes	100	100	100	100	ge:96s1:7ra
Default	A	2	B		A	Yes	50 - 70	60	60	60	ge:96s1:7ra
Default	A	3	C		B; A	No	50	50	30	35	ge:96s1:7ra
Default	A	3	D		B; A	No	>50	50.5	30.3	70 ¹	ge:96s1:7ra
Default	A	2	D		A	No	30 - 50	40	40	70	ge:96s1:7ra
Default	A	2	E		A	Yes	<10	9.9	9.9	9.9	ge:96s1:7ra
Default	A	3	C		A; E	No	50	50	4.95	35	ge:96s1:7ra

Functional Overview - Atomus

- Example Where used report

Where-used for 'Milli-Q Water'

IngredientEIID	IngredientName	IngredientCAS	IngredientCode	IngrConcnInMixture	MixtureEIID	MixtureName	MixtureCAS	MixtureCode	MixtureLevel
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	99.91	8038:o4jt:7rb	0.1MHCl		1659359	1
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	99.89	67:obk0:7rb	0.3 mM EDTA		ML089200	1
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	81.44	5r:o2ps:7rb	0.5 M EDTA		2758565	1
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	83	5u:82ps:7rb	0.68M Borate Buffer		3849855	1
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	99.91	64:6bk0:7rb	0.6 mM cAMP Stock Solution, 480 µL		1818723	1
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	83.42	cl:seq8:7rb	20Y PBS		1721842	1
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	89.0220	ck:2eq8:7rb	100 mg/mL BSA		1703845	1,2
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	98	8i:29hs:7rb	100 mM MgCl ₂		224486	1
1nj:j3sa:5	Milli-Q Water	7732-18-5	1532142	96	i5:efds:7rb	99% Phosphorylated Standard		1758738	2

Sphera CE Customers



Component	Requirements	Comments
Processor	Dual Processor Intel Xeon 3 GHz (or greater)	
Memory	16 GB or more DDRAM	
Hard Disk	At least 5 GB free space for an application partition or on system partition (100 GB partition)	
Operating System	<ul style="list-style-type: none"> Windows Server 2016 OR Windows Server 2019 (recommended) 	
Monitor and Graphics	SVGA 1280 x 1024	
Other Software	<ul style="list-style-type: none"> Microsoft .NET Framework 4.6.1 Internet Information Services (IIS) (Required by the CE for EH&S / enhAnCE Help) SAP GUI 7.60 (As of April 12th, 2022, SAP no longer supports version 7.60.) or 7.70 (Recommended) SAP .Net Connector 3.0.24 for .Net 4.0 on x64 Microsoft Edge or Google Chrome (to view the CE for EH&S Help) MS Office Suite 2013 or later (Excel locally installed) 	
	<ul style="list-style-type: none"> Remote RDP access 1 concurrent business user (for Rule configuration) 	
	<p>SQL</p> <ul style="list-style-type: none"> For SQL 2016/2019—ODBC driver: <ul style="list-style-type: none"> - SQL Native Client version 2011.110.3000.0 or later - The latest version of ODBC Driver 17 for SQL Server (recommended) 	

System requirements : Compliance Engine - Database Server requirements

Component	Requirements	Comments
Processor	Dual Processor Intel Xeon 3 GHz (or greater)	
Memory	8 GB or more DDRAM (dedicate a minimum of 3 GB of memory to the operating system, with the remaining memory dedicated exclusively to the database server.) keep up to 20% of your database space empty to ensure optimal performance	
Hard disk	50+ GB Hard Disk (refer to best practices recommended by your database server manufacturer)	
Operating System	<ul style="list-style-type: none"> Windows Server 2016 or Windows Server 2019 (recommended) 	
	Consult your database server manufacturer to find out which OS versions are supported/certified for your database server.	
Monitor and Graphics	SVGA	
Other software	Microsoft SQL Server (any one of the following): <ul style="list-style-type: none"> 2016 (SP2 or later) 2019 	

Component	Requirements	Comments
The following requirements assume that you have a dedicated machine for the WWI, Compliance Engine for EH&S, and EH&S OCC applications.		
Processor	64-bit, 2 cores minimum, 4 cores recommended	
Memory	4 GB or more DDR RAM (at least 8 GB Recommended)	
Hard disk	1TB partition dedicated to OCC folder	
Operating system	Windows Server 2016 (x64) or 2019 Server (x64) (recommended)	
Other software	<ul style="list-style-type: none"> Open Content Connector (OCC) SP46 or later (OSS note 568302 for SAP) 	
	<ul style="list-style-type: none"> SAP EH&S ECC 6.0 EHP4 or later 	
	<ul style="list-style-type: none"> Microsoft IIS 8.5 or later, Microsoft .NET Framework 4.6.1 	
	<ul style="list-style-type: none"> Microsoft Access 2013 or later (locally installed) 	
	<ul style="list-style-type: none"> 1 RDP access - For business User access to the SAP GUI installed on this machine) 	

Component	Requirements	Comments
<p>The following requirements assume that you have a dedicated machine for the WWI, Compliance Engine for EH&S, and EH&S OCC applications. WWI Server requirements from OSS Notes 568302</p>		
Processor	64-bit, 2 cores minimum, 4 cores recommended	
Memory	2 GB or more DDR RAM (at least 4 GB Recommended)	
Hard disk	1TB partition dedicated to OCC folder	
Operating system	Microsoft Windows Server 2016, 2019, or 2022 (see SAP Note 2240394)	
Other software	Microsoft Office Word 2016 / 2019 / 2021 Microsoft .NET 3.5 and .NET 4.0 For printing inbound PDF documents with WWI: <ul style="list-style-type: none"> • Adobe Acrobat Reader 7.0 / 8.0 / 9.0 / XI (11) / DC, see also SAP Note 744096. • Or use Foxit Reader. Latest SP of SAP WWI software (see SAP Note 568302)	