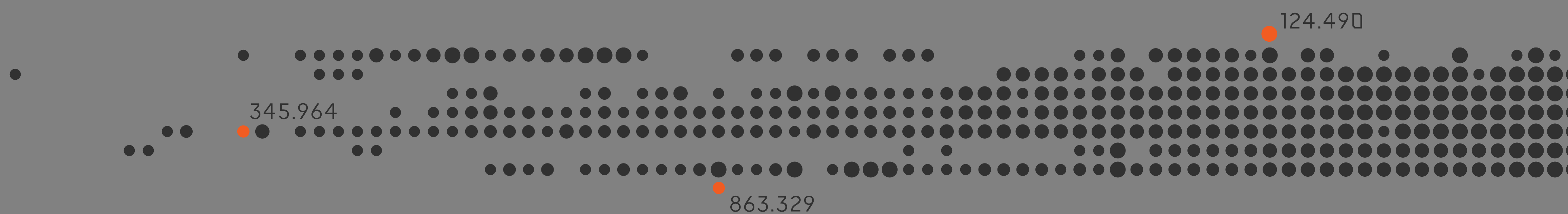


The world's first Autonomous
Requirements Planning (ARP) Engine

SCAS D365 Data Model

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SCAS Overview

Seeloz is the global leader in Supply Chain Automation, leading a transformation wave to revamp operational efficiency across the world's most critical value chains through our AI-driven Autonomous Requirements Planning (ARP) technology. Covering more than twenty industry verticals and all major types of supply chains, Seeloz Supply Chain Automation Suite™ (SCAS), the world's first ARP, plays a pivotal role in reimagining supply chains using Artificial Intelligence.

Addressing the major challenges faced by traditional supply chain management techniques and resulting in making the task of managing complex supply chains pretty much beyond human capacity, SCAS's core ARP technology consists of a game-changing Reinforcement-Learning-based planning engine that's capable of autonomously driving supply chain functions including procurements, production & cross-warehouse movements (transfers) with no forecasting-based execution & no need for traditional parameter & equation-driven inventory planning.

Through tailoring the core technology to fit different supply chain types, SCAS offers Vertical AI solutions for:

1. SCAS Production: for Inbound Manufacturing Supply Chains.
2. SCAS Distribution: for Outbound Distribution Supply Chains.
3. SCAS MRO: for Maintenance, Repair & Overhaul (MRO) Supply Chains.
4. SCAS OSPAS (Oil Supply Planning & Scheduling): for Upstream Oil & Gas Supply Chains.

Across these supply chains, SCAS solutions comprehensively manage inventory allocation activities while driving value for your organization, your internal and external trading partners. The key benefits of the SCAS solutions are:

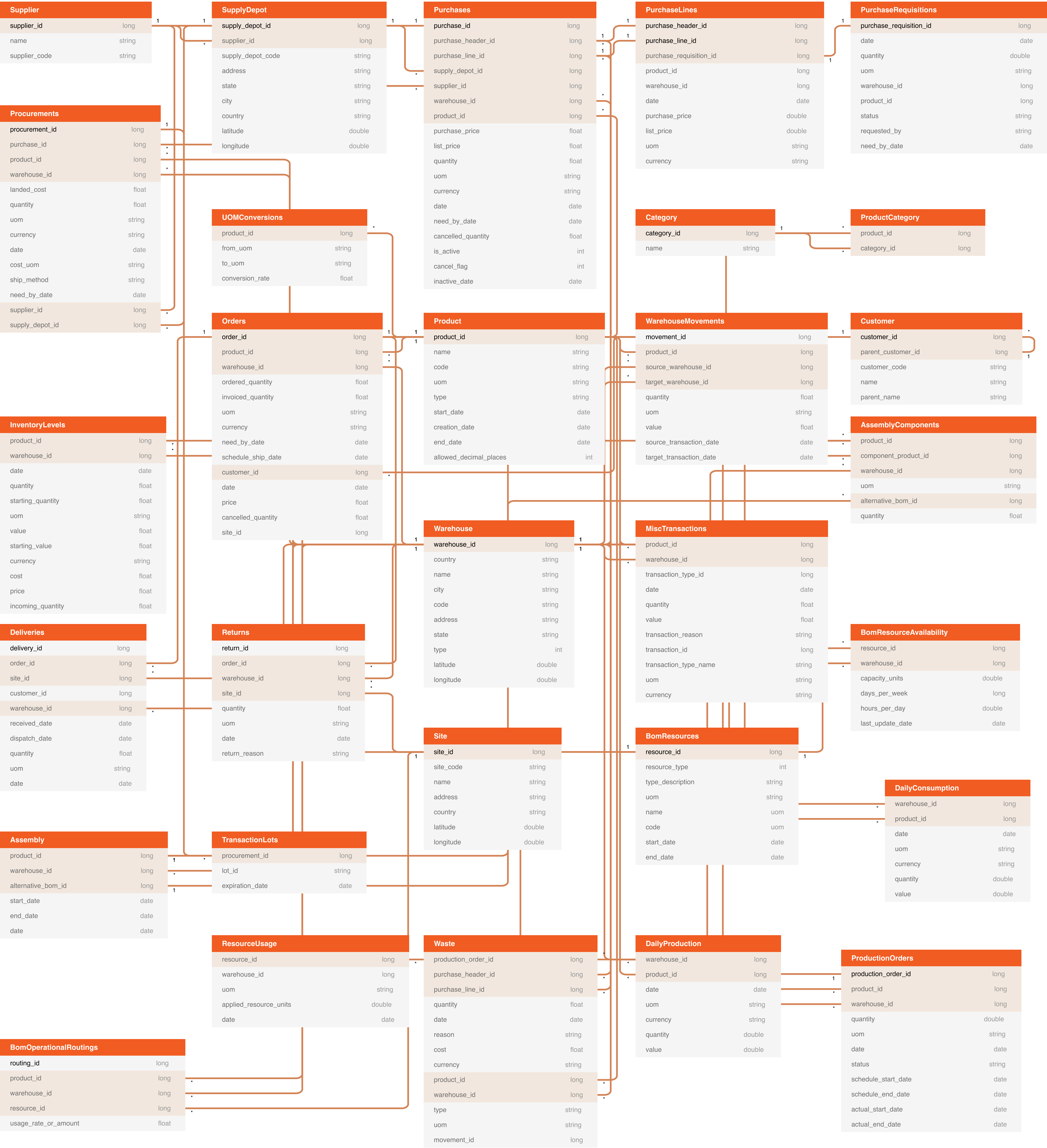
- 20% - 40% reduction in overstock paired with 60% - 80% reduction in stockouts.
- Optimal Inventory procurement and replenishment decisions.
- Real-time Inventory visibility and decision support.
- Minimized operational costs & supply chain overhead with maximized topline revenues.
- Flexibility to make physical supply chain changes without additional costs.

SCAS provides Seeloz Customers a great opportunity to take on a gradual milestone-driven **Supply Chain Transformation Journey**. Through its **strategic global partnership with Microsoft**, the world's largest enterprise software company, Seeloz is leveraging the power of Microsoft Azure to transform massive global supply chains through SCAS. **The Seeloz/Microsoft alliance** would be the perfect technology partners for our customers throughout this journey!

SCAS Master Data Model

SCAS Master Data Model (MDM) is the starting point of our implementation and discovery process. Seeloz Solution Integration and Delivery team works with clients to understand their ERP environment and customization, data streams and data warehouse to help define scope of tables and fields that are mapped to our MDM for consumption by AI Modeling Engine, Constraints Engine and Simulation Engine. We have standardized this process through a list of required tables and standard field names with respect to their ERP applications for the following SCAS use cases:

- SCAS Distribution
- SCAS Production
- SCAS MRO
- SCAS OSPAS



D365 Data Model

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
purchases This table contains all the approved purchase orders that have been issued	purchase_id	Long	PK		Y	The unique identifier of the purchase order in the ERP system. Usually auto-generated by the system	Purchase order line V2.[Concatenate PURCHASEORDERNUMBER & LINENUMBER]
	purchase_header_id	Long	FK		Y	References purchase_lines.purchase_header_id	Purchase order lines V2.PURCHASEORDERNUMBER
	purchase_line_id	Long	FK		Y	References purchase_lines.purchase_line_id	Purchase order lines V2.LINENUMBER
	supply_depot_id	Long	FK		Y	References supply_depot.supply_depot_id	Purchase order headers V2.INVOICEVENDORACCOUNTNUMBER
	supplier_id	Long	FK		Y	References supplier.supplier_id	Purchase order headers V2.INVOICEVENDORACCOUNTNUMBER
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Purchase order lines V2.RECEIVINGWAREHOUSEID
	product_id	Long	FK		Y	References product.product_id	Purchase order lines V2.ITEMNUMBER
	purchase_price	Double			Y	The price per item at which the product was purchased	Purchase order lines V2.PURCHASEPRICE
	list_price	Double			Y	The catalog price per item	Purchase order lines V2.PROJECTSALESPRICE
	quantity	Double			Y	Quatity of items purchased	Purchase order lines V2.ORDEREDPURCHASEQUANTITY
	uom	String			Y	The UoM of the quantity purchased	Purchase order lines V2.PURCHASEUNITSYMBOL
	currency	String			Y	The currency of the purchase_price and list_price. Currency must be in ISO 4217 format	Purchase order headers V2.CURRENCYCODE
	date	Date(YYYY-MM-DD)			Y	Date on which the purchase order was created	Purchase order headers V2.ACCOUNTINGDATE
	need_by_date	Date(YYYY-MM-DD)			Y	Date on which goods need to be received at warehouse/plant	Purchase order headers V2.CONFIRMEDDELIVERYDATE
	is_active	Long			Y	Flag to identify active & inactive purchase orders	Purchase order lines V2.Line status
	cancelled_quantity	Double			Y	The quantity which has been cancelled from the purchase order	cancel Qty = order qty when status is canceled.
	inactive_date	Date(YYYY-MM-DD)			Y	Date on which the purchase order was closed/marked as inactive	Purchase order lines. LastModifiedDateTime
	cancel_flag	Long			Y	Flag to identify cancelled purchase orders	Purchase order lines V2.PURCHASEORDERLINESTATUS

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
supplier Contains information about Vendor / Suppliers that provide raw materials, semi-processed or finished goods	supplier_id	Long	PK		Y	32 bit positive hash integer of supplier_code (mask: 0x00000000FFFFFFFFL)	Vendors V2.VENDORACCOUNTNUMBER
	supplier_code	String			Y	The unique identifier of the supplier in the ERP system	Vendors V2.VENDORACCOUNTNUMBER
	name	String			Y	The name of the supplier in the ERP	Vendors V2.VENDORORGANIZATIONNAME
supply_depot This table contains the different locations of the suppliers / vendors from where the goods / consignments are dispatched. E.g. the supplier ABC chemicals can have a supply depot in Austin Texas and another one somewhere in California	supply_depot_id	Long	PK		Y	32 bit positive hash integer of supply_depot_code (mask: 0x00000000FFFFFFFFL)	Vendors V2.ADDRESSLOCATIONID
	supplier_id	Long	FK		Y	References supplier.supplier_id	Vendors V2.VENDORACCOUNTNUMBER
	supply_depot_code	String			Y	The unique identifier of the supply_depot in the ERP system	Vendors V2.ADDRESSLOCATIONID
	address	String			Y	Address	Vendors V2.FORMATTEDPRIMARYADDRESS
	state	String			Y	State	Vendors V2.ADDRESSSTATEID
	city	String			Y	City	Vendors V2.ADDRESSCITY
	country	String			Y	Country in ISO 3166-1 alpha-2 format	Vendors V2.Country/region
	latitude	Double			Y	Latitude	Vendors V2.ADDRESSLATITUDE
	longitude	Double			Y	Longitude	Vendors V2.ADDRESSLONGITUDE
procurements This table contains all the inbound deliveries / goods receiving transactions resulting from purchase orders	procurement_id	Long	PK		Y	The unique identifier of the procurement in the ERP system. This could be a goods receipt transaction ID. Usually auto-generated by the system	Product receipt line.PRODUCTRECEIPTNUMBER
	purchase_id	Long	FK		Y	References purchases.purchase_id	Product receipt line.[Concat PURCHASEORDERNUMBER & PURCHASEORDERLINENUMBER]
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Product receipt line.RECEIVINGWAREHOUSEID
	product_id	Long	FK		Y	References product.product_id	Product receipt line.ITEMNUMBER
	landed_cost	Double			Y	The landed price / cost of the products / items	Purchase order lines V2.NETAMOUNT/Purchase order lines V2.Quantity
	quantity	Double			Y	Quatity	Product receipt line.RECEIVEDINVENTORYQUANTITY
	uom	String			Y	The UoM of the quantity received	Product receipt line.PURCHASEUNITSYMBOL

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
	currency	String			Y	The currency of the landed_price column. Currency must be in ISO 4217 format	Purchase order headers V2.CURRENCYCODE
	date	Date(YYYY-MM-DD)			Y	Date on which the purchase order was created	Purchase order headers V2.ACCOUNTINGDATE
	ship_date	Date(YYYY-MM-DD)				Date on which the supplier shipped the goods	Product receipt line.PRODUCTRECEIPTDATE
	ship_method	String				Land / Sea / Air	Purchase order headers V2.TRANSPORTATIONMODEID
	need_by_date	Date(YYYY-MM-DD)			Y	The date we expect goods to arrive at location	Purchase order headers V2.EXPECTEDEDELIVERYDATE
	supply_depot_id	Long	FK		Y	References supply_depot.supply_depot_id	Purchase order headers V2.INVOICEVENDORACCOUNTNUMBER
	supplier_id	Long	FK		Y	References supplier.supplier_id	Purchase order headers V2.INVOICEVENDORACCOUNTNUMBER
	cost_uom	String			Y	The UoM of the cost	Purchase order lines.PURCHASEUNITSYMBOL
customer	customer_id	Long	PK		Y	32 bit positive hash integer of customer_code (mask: 0x00000000FFFFFFFFL)	Customers V3.CUSTOMERACCOUNT
	customer_code	String			Y	The unique identifier of the customer in the ERP system	Customers V3.CUSTOMERACCOUNT
	parent_customer_id	Long	FK			References customer.customer_id	Customers V3.CUSTOMERACCOUNT
	name	String			Y	Name of the customer	Customers V3.ORGANIZATIONNAME
	parent_name	String				Name of the parent customer if any	Customers V3.ORGANIZATIONNAME
site	site_id	Long	PK		Y	32 bit positive hash integer of site_code (mask: 0x00000000FFFFFFFFL)	Customers V3.ELECTRONICLOCATIONID
	site_code	String			Y	The unique identifier of the site in the ERP system	Customers V3.ELECTRONICLOCATIONID
	name	String			Y	Name of the customer	Customers V3.NAMEALIAS
	address	String			Y	Address	Customers V3.(DELIVERYADDRESSSTREETNUMBER - DELIVERYADDRESSSTREET - DELIVERYADDRESSSTATE)
	country	String			Y	Country in ISO 3166-1 alpha-2 format	Customers V3.DELIVERYADDRESSSTATE
	latitude	Double				Latitude	Customers V3.DELIVERYADDRESSLATITUDE
	longitude	Double				Longitude	Customers V3.DELIVERYADDRESSLONGITUDE

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
customer_site	customer_id	Long			Y	32 bit positive hash integer of customer_code (mask: 0x00000000FFFFFFFFL)	
	site_id	Long			Y	32 bit positive hash integer of site_code (mask: 0x00000000FFFFFFFFL)	
orders	order_id	Long	PK		Y	The unique identifier of the order in the ERP system. Usually auto-generated by the system	Sales order lines V2.SALESORDERNUMBER + LINECREATIONSEQUENCENUMBER, CUSTOMERSLINENUMBER
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Sales order lines V2.SHIPPINGWAREHOUSEID
	product_id	Long	FK		Y	References product.product_id	Sales order lines V2.ITEMNUMBER
	ordered_quantity	Double			Y	The quantity ordered by the customer.	Sales order lines V2.ORDEREDSALESQUANTITY
	invoiced_quantity	Double				The quantity invoiced to the customer	Sales invoice lines V3.INVOICEDQUANTITY
	uom	String			Y	The UoM of ordered_quantity, invoiced_quantity and cancelled_quantity	Sales order lines V2.SALESUNITSYMBOL
	price	Double			Y	The unit settling price of the product being sold	Sales order lines V2.SALESPRICE
	currency	String			Y	The currency of the price column. Currency must be in ISO 4217 format	Sales order lines V2.CURRENCYCODE
	need_by_date	Date(YYYY-MM-DD)			Y	Date on which the customer expects the goods to arrive	Sales order lines V2.REQUESTEDRECEIPTDATE
	schedule_ship_date	Date(YYYY-MM-DD)			Y	Date when we have to dispatch goods in order to meet the need_by_date	Sales Order lines V2.REQUESTEDSHIPPINGDATE
	date	Date(YYYY-MM-DD)			Y	Date on which the order was received	Sales order headers V2.ORDERCREATIONDATETIME
	customer_id	Long	FK		Y	References customer.customer_id	Sales order headers V2.ORDERINGCUSTOMERACCOUNTNUMBER
	site_id	Long	FK		Y	References site.site_id	Sales order lines.SHIPPINGSITEID
	cancelled_quantity	Double				The quantity that is cancelled from the order	Qty when Sales order lines.SALESORDERLINESTATUS = Canceled

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
					Optional		
returns This table contains information about the returns made by the customer	order_id	Long	FK		Y	References orders.order_id	Return order lines.RETURNINGINVENTORYLOTID
	customer_id	Long	FK		Y	References customer.customer_id	Return order lines.CUSTOMERACCOUNTNUMBER
	site_id	Long	FK		Y	References site.site_id	Return order lines.REURNSITEID
	warehouse_id	Double	FK		Y	References warehouse.warehouse_id	Return order lines.RETURNWAREHOUSEID
	date	Date(YYYY-MM-DD)			Y	Date on which the return record was created	Return order lines.ACTUALRETURNARRIVALDATE
	quantity	Double			Y	Quantity returned	Return order lines.RETURNEDSALESQUANTITY
	uom	String			Y	The UoM of the quantity returned	Return order lines.SALESUNITSYMBOL
	return_reason	String			Y	The reason stated by the customer for the return	Reason codes.Description
deliveries This table contains information about all the outgoing deliveries to the customers for order fulfillment	delivery_id	Long	PK		Y	The unique identifier of the delivery in the ERP system. Usually auto-generated by the system	packingSlipTransEntity.PackingSlipId
	order_id	Long	FK		Y	References orders.order_id	Sales order lines V2.SALESORDERNUMBER + LINECREATIONSEQUENCENUMBER, CUSTOMERSLINENUMBER
	customer_id	Long	FK		Y	References customer.customer_id	Sales order headers V2.ORDERINGCUSTOMERACCOUNTNUMBER
	site_id	Long	FK		Y	References site.site_id	Sales order Lines.SHIPPINGSITEID
	warehouse_id	Double	FK		Y	References warehouse.warehouse_id	Sales order lines V2.SHIPPINGWAREHOUSEID
	date	Date(YYYY-MM-DD)			Y	Date of entry	Sales order headers V2.ORDERCREATIONDATETIME
	received_date	Date(YYYY-MM-DD)			Y	Date on which the customer receives the order	Sales order lines V2.CONFIRMEDRECEIPTDATE
	dispatch_date	Date(YYYY-MM-DD)			Y	Date on which the delivery was dispatched from the warehouse to the customer	Sales order lines V2.CONFIRMEDSHIPPINGDATE
	quantity	Double			Y	Quantity delivered	custPackingSlipTransEntity.QTY
	uom	String			Y	The UoM of the quantity delivered	Sales order lines V2.SALESUNITSYMBOL

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
warehouse This table contains all warehouses / plants / outlets that have inventory	warehouse_id	Long	PK		Y	The unique identifier of the warehouse/plant/outlet in the ERP system. Usually auto-generated by the system	Warehouses.WAREHOUSEID
	country	String			Y	Country in ISO 3166-1 alpha-2 format	Warehouses.PRIMARYADDRESSCOUNTRYREGIONID
	name	String			Y	Name	Warehouses.WAREHOUSENAME
	city	String			Y	City	Warehouses.PRIMARYADDRESSCITY
	code	String		Y	Y	Code used to identify warehouse	Warehouses.WAREHOUSEID
	address	String			Y	Address	Warehouses.FORMATTEDPRIMARYADDRESS
	state	String			Y	State	Warehouses.PRIMARYADDRESSCOUNTRYID
	type	Integer			Y	1 = warehouse - only has inventory but no manufacturing/assembly lines 2 = outlet / retail store 3 = manufacturing plant - has both inventory and manufacturing/assembly	Warehouses.WAREHOUSETYPE
	latitude	Double			Y	Latitude	Warehouses.PRIMARYADDRESSLATITUDE
	longitude	Double			Y	Longitude	Warehouses.PRIMARYADDRESSLONGITUDE
							InventTrans.ReferenceCategory = "TransferOrderShip" OR InventTrans.ReferenceCategory = "TransferOrderReceive"
warehouse_movements This table contains records for all movements between warehouses / plants / outlets	movement_id	Long	PK		Y	The unique identifier of the movement / transaction of the goods in the ERP system	Transfer order headers.TRANSFERORDERNUMBER
	product_id	Long	FK		Y	References product.product_id	Transfer order lines.ITEMID
	source_warehouse_id	Long	FK		Y	References warehouse.warehouse_id. The warehouse/plant/outlet ID in the ERP system from where goods are being dispatched	Transfer order lines.SHIPPINGWAREHOUSEID
	target_warehouse_id	Long	FK		Y	References warehouse.warehouse_id. The warehouse/plant/outlet ID in the ERP system where goods are being received	Transfer order headers.RECEIVINGWAREHOUSEID
	quantity	Double			Y	The quantity of product being moved	inventTransExportEntity.QTY
	uom	String			Y	UoM of the quantity	Transfer order lines.INVENTORYUNITSYMBOL
	value	Double			Y	Value of goods being moved	inventTransExportEntity.REVENUEAMOUNTPHYSICAL
	currency	String			Y	The currency of the value column. Currency must be in ISO 4217 format	inventTransExportEntity.CURRENCYCODE
	source_transaction_date	Date(YYYY-MM-DD)			Y	Date on which the goods are dispatched from the source warehouse	Transfer order lines.REQUESTEDSHIPPINGDATE
	target_transaction_date	Date(YYYY-MM-DD)			Y	Date on which the goods are received at the target warehouse	Transfer order lines.REQUESTEDRECEIPTDATE

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
misc_transactions This table records all the miscellaneous transactions that occur in the system which have an impact on the inventory level of the product. For example if adjustments need to be made in order to match with physical stock, those transactions are recorded here	transaction_id	Long	PK		Y	The unique identifier of the transaction in the ERP system	inventTransExportEntity.TRANSACTIONID
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id. The warehouse/plant/outlet in the ERP system where transasction is made	inventTransExportEntity.INVENTLOCATIONID
	quantity	Double			Y	Quantity	inventTransExportEntity.QTY
	uom	String			Y	UoM of Quantity	Released products V2.INVENTORYUNITSYMBOL
	value	Double			Y	Total value of the quantity transacted	inventTransExportEntity.REVENUEAMOUNTPHYSICAL
	currency	String			Y	The currency of the value column. Currency must be in ISO 4217 format	inventTransExportEntity.CURRENCYCODE
	date	Date(YYYY-MM-DD)			Y	Date when record was created	inventTransExportEntity.DATEPHYSICAL
	product_id	Long	FK		Y	References product.product_id	inventTransExportEntity.ITEMID
	transaction_type_id	Long			Y	Transaction type id. The type of transaction in the ERP system.	HASH(inventTransExportEntity.REFERENCECATEGORY)
	transaction_reason	String			Y	Reason of the misc transaction provided	inventTransExportEntity.REFERENCECATEGORY
	transaction_type_name	String			Y	Name/description of the misc transaction provided	inventTransExportEntity.REFERENCECATEGORY
inventory_levels This table contains the daily inventory/stock level of each product at each warehouse. Days that exhibit no change in stock level will also be recorded in this table	product_id	Long	FK		Y	References product.product_id	inventTransExportEntity.ITEMID
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	inventTransExportEntity.INVENTLOCATIONID
	date	Date(YYYY-MM-DD)			Y	Date	inventTransExportEntity.DATEPHYSICAL
	quantity	Double			Y	The inventory quantity of the product in the warehouse.	inventTransExportEntity.QTY
	value	Double			Y	The total value fo the product inventory in the warehouse	inventTransExportEntity.REVENUEAMOUNTPHYSICAL
	currency	String			Y	The currency of the value and starting_value column. Currency must be in ISO 4217 format	inventTransExportEntity.CURRENCYCODE
	cost	Double			Y	The costof the product	inventTransExportEntity.CostAmountPosted
	price	Double			Y	The unit price of the product	inventTransExportEntity. (value/quantity)

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
uom_conversions This table contains all the possible conversion factors between related uom's. E.g. Kg -> Pound, Pound -> Kg, Kg -> Grams, Pack -> Piece, etc	product_id	Long	FK		Y	References product.product_id	Product specific unit conversions.PRODUCTNUMBER
	from_uom	String			Y	The source uom	Product specific unit conversions.FROMUNITSYMBOL
	to_uom	String			Y	The target uom	Product specific unit conversions.TOUNITSYMBOL
	conversion_rate	Double			Y	The conversion rate which will be used to convert source to target.	Product specific unit conversions(NUMERATOR/DENOMINATOR)
category Contains the sub-groups / categories to which products are assigned. E.g. Printers, Displays etc	category_id	Long	PK		Y	The Category ID	Hash(Product category assignments.PRODUCTCATEGORYHIERARCHYNAME)
	name	String			Y	The category name	Product Categories.CATEGORYNAME
product_category Bridge table between product and cateogory	product_id	Long	FK		Y	References product.product_id	Product category assignments.PRODUCTNUMBER
	category_id	Long	FK		Y	References category.category_id	Hash(Product category assignments.PRODUCTCATEGORYHIERARCHYNAME)
product Table containing all the unique products / materials of the system that have their inventory tracked by the ERP system	product_id	Long	PK		Y	The unique identifier of the product in the ERP system. Usually auto-generated by the system. If the product_id is a string, create a 32 bit positive hash integer (mask: 0x00000000FFFFFFFFL)	Released products V2.ITEMNUMBER
	name	String			Y	Name of the Product / Material in the system	Released products V2.PRODUCTSEARCHNAME
	code	String		Y	Y	The code used to identify the product in the system. This code is unique and user defined	Released products V2.ITEMNUMBER
	uom	String			Y	The base Unit Of Measure of the product in the system. (E.g. Pack, Roll, Kilograms, Pounds etc)	Released products V2.INVENTORYUNITSYMBOL
	type	String			Y	This classifies the product as a consumable, finished-goods, semi-finished goods, raw material, waste or by-product. More types can be added depending upon the business	Released products V2.PRODUCTTYPE
	start_date	Date(YYYY-MM-DD)			Y	Date when first transaction / movement for the product was recorded in the system	We can create this by looking at the products very first transaction
	creation_date	Date(YYYY-MM-DD)			Y	Date when product was created in the system	Released products V2.SELLSTARTDATE
	end_date	Date(YYYY-MM-DD)			Y	Date when product was made inactive / discontinued in the system	Released products V2.SELLENDDATE
	allowed_decimal_places	Long				The number of decimal places the base uom quantity will be rounded off to	Unit.DecimalPrecision

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
daily_production This table records all the goods produced / manufactured / assembled in a plant per day.	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	InventTrans.ReferenceCategory = "Production" Consider Line with DatePhysical value or where StatusReceipt= Received. Then the qty is produced. Production bill of materials lines.CONSUMPTIONWAREHOUSEID
	product_id	Long	FK		Y	References product.product_id	Production bill of materials lines.ITEMNUMBER
	quantity	Double			Y	Quantity	inventTransExportEntity.QTY
	uom	String			Y	UoM of Quantity	Released products V2.INVENTORYUNITSYMBOL
	value	Double			Y	Total value of the quantity produced	inventTransExportEntity.REVENUEAMOUNTPHYSICAL
	currency	String			Y	The currency of the value column. Currency must be in ISO 4217 format	inventTransExportEntity.CURRENCYCODE
	date	Date(YYYY-MM-DD)			Y	Date	inventTransExportEntity.DATEPHYSICAL
							InventTrans.ReferenceCategory = "ProdLine"
daily_consumption This table records all the materials / items consumed (which should be part of bom for a finished product) in a plant to create finished / semi-finished goods per day.	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Production bill of materials lines.CONSUMPTIONWAREHOUSEID
	product_id	Long	FK		Y	References product.product_id	Production bill of materials lines.ITEMNUMBER
	quantity	Double			Y	Quantity	inventTransExportEntity.QTY
	uom	String			Y	UoM of Quantity	Released products V2.INVENTORYUNITSYMBOL
	value	Double			Y	Total value of the quantity consumed	inventTransExportEntity.REVENUEAMOUNTPHYSICAL
	currency	String			Y	The currency of the value column. Currency must be in ISO 4217 format	inventTransExportEntity.CURRENCYCODE
	date	Date(YYYY-MM-DD)			Y	Date	inventTransExportEntity.DATEPHYSICAL
assembly This table contains the bom used for a product on each day	product_id	Long	FK		Y	References product.product_id	Bill of materials versions v3. MANUFACTUREDITEMNUMBER
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Bill of materials versions v3.Production SiteId

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
	alternative_bom_id	Long			Y	The bom id used on that day for the product	Bill of materials versions v3.BOMID
	start_date	Date(YYYY-MM-DD)			Y	Date on which bom is activated	Bill of materials versions v3.VALIDFROMDATE
	end_date	Date(YYYY-MM-DD)			Y	Date on which bom is deactivated	Bill of materials versions v3.VALIDTODATE
assembly_components This table contains the components used by each bom for a product	product_id	Long	FK		Y	References product.product_id	Bill of materials headers and versions v3.MANUFACTUREDITEMNUMBER
	component_product_id	Long	FK		Y	References product.product_id. The product ID used in bom as a component	Bill Of materials Lines v3.ITEMNUMBER
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Bill Of materials Lines v3.CONSUMPTIONWAREHOUSEID
	uom	String			Y	UoM of the component_product_id	Bill Of materials Lines v3.PRODUCTUNITSYMBOL
	alternative_bom_id	Long			Y	Bom ID	Bill Of materials Lines v3.BOMID
	quantity	Double			Y	Quantity of components needed to manufacture one product	Bill Of materials Lines v3.QUANTITY
purchase_requisitions This table contains the components used by each bom for a product	date	Date(YYYY-MM-DD)			Y	Date	Purchase requisitions V2.DEFAULTACCOUNTINGDATE
	product_id	Long	FK		Y	References product.product_id	Purchase requisition lines.ITEMNUMBER
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Purchase requisition lines.RECEIVINGWAREHOUSEID
	quantity	String			Y	Quantity	Purchase requisition lines.REQUESTEDPURCHASEQUANTITY
	supply_depot_id	Long			Y	References supply_depot.supply_depot_id	Purchase requisitions lines.VENDORACCOUNTNUMBER
	status	Double			Y	PR status	Purchase requisition lines.PR.LINESTATUS
	need_by_date	Double			Y	Date on which goods need to be received at warehouse/plant	Purchase requisitions V2.DEFAULTREQUESTEDDATE
	request_date	Double			Y	Date on which the goods are requested	Purchase requisition lines.ACCOUNTINGDATE
	requested_by	Double			Y	The requesting user	Purchase requisitions V2.REQUISITIONNAME

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
	purchase_requisition_id	Double			Y	Unique identifier of Purchase requisition	Purchase requisitions V2.REQUISITIONNUMBER
	uom	Double			Y	Unit of Measure	Released products V2.INVENTORYUNITSYMBOL
bom_resources This table contains informtion about all the resources available in the plant which are used in production planning	resource_id	Long	PK		Y	The unique identifier of the resource in the system	Operations resource.RESOURCEID
	resource_type	Long			Y	Type of resource (1. Machine 2. Person 3. Currency 4. Miscellaneous 5. Amount 6. Physical Space)	Operations resource.OPERATIONSRESOURCECTYPE
	type_description	String			Y	Description against the resource type	Resource group.GROUPNAME
	uom	String			Y	Unit of measure	Operations resource.CAPACITYUNIT
	name	String			Y	Name of the resource	Operations resource.RESOURCENAME
	code	String				Code assigned to the resource	Operations resource.RESOURCEID
	start_date	Date(YYYY-MM-DD)			Y	Date on which resource is created in the system	Resource group membership.VALIDFROM
	end_date	Date(YYYY-MM-DD)			Y	Date on which resource is disabled in the system	Resource group membership.VALIDTO
bom_resource_availability This table contains informtion about available load bearing capacity of resources	resource_id	Long	FK		Y	References bom_resources.resource_id	Operations resource.RESOURCEID
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Resource groups.INPUTWAREHOUSELOCATIONID
	capacity_units	Double			Y	No. of units of the resource available	Operations resource.CAPACITYUNIT
	days_per_week	Long			Y	No. of days resource is available each week	
	hours_per_day	Double			Y	No. of hours resource is available each day	Calender.WORKINGHOURS
	last_update_date	Date(YYYY-MM-DD)			Y	Date when the capacity information was last updated	Resource group calendar assignments.VALIDFROM
bom_operational_routings This table contains information about usage of resources in manufacturing products	routing_id	Long	PK		Y	Identifier for the method opted to produce/manufacture products	ROUTEROUTEOPERATIONENTITY.ROUTEID
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Resource groups.INPUTWAREHOUSELOCATIONID

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
	product_id	Long	FK		Y	The unique identifier of the product being manufactured	Route Versions V2.ITEMID
	resource_id	Long	FK		Y	Resource utilized in the manufacturing	Route operation properties V2.COSTINGOPERATIONRESOURCEID
	usage_rate_or_amount	Double			Y	Quantity or usage rate of resource for manufacturing goods	Route operation properties V2.PROCESSQUANTITY
resource_usage This table contains information about history of resource usage in manufacturing products (per day resource usage)	resource_id	Long	FK		Y	References bom_resources.resource_id	Production route transactions.OPERATIONRESOURCEID
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Resource groups.INPUTWAREHOUSELOCATIONID
	uom	String			Y	Unit of measure	Operations resource.CAPACITYUNIT
	applied_resource_units	Double			Y	Units of resource used up or charged (in the resource's uom)	Production route transactions.REGISTEREDHOURS
	date	Date(YYYY-MM-DD)			Y	Date	Production route transactions.ESTIMATEDACCOUNTINGDATE
production_orders This table contains information about history of production orders	production_order_id	Long	PK		Y	Identifier for the production order	Production orders.PRODUCTIONORDERNUMBER
	product_id	Long	FK		Y	References product.product_id	Production orders.ITEMNUMBER
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Production orders.PRODUCTIONWAREHOUSEID
	quantity	Double			Y	Quantity of goods produced	Production orders.SCHEDULEDQUANTITY
	schedule_start_date	Date(YYYY-MM-DD)			Y	Scheduled start date	Production orders.SCHEDULEDDATE
	schedule_end_date	Date(YYYY-MM-DD)			Y	Scheduled end date	Production orders.SCHEDULEDENDDATE
	actual_start_date	Date(YYYY-MM-DD)				Actual start date	Production orders.STARTEDDATE
	actual_end_date	Date(YYYY-MM-DD)				Actual end date	Production orders.REPORTEDASFINISHEDDATE
	date	Date(YYYY-MM-DD)			Y	Date of creation	Production orders.RELEASEDDATE
	uom	String			Y	Unit of measure	Released products V2.INVENTORYUNITSYMBOL
	status	String			Y	Current status of production order	Production orders.PRODUCTIONORDERREMAINDERSTATUS

Table	Column	Data Type	PK / FK	Unique	Required	Description	D365 Mapping
waste This table contains the products that have been damaged / wasted due to any reason	product_id	Long	FK		Y	References product.product_id	Production orders.ITEMNUMBER
	warehouse_id	Long	FK		Y	References warehouse.warehouse_id	Production orders.PRODUCTIONWAREHOUSEID
	uom	String			Y	Unit of measure	Released products V2.INVENTORYUNITSYMBOL
	date	Date(YYYY-MM-DD)			Y	Date of creation	inventTransExportEntity.DATEPHYSICAL
	currency	String			Y	The currency of the value column. Currency must be in ISO 4217 format	inventTransExportEntity.CURRENCYCODE
	quantity	Double			Y	Quantity	Production orders.(SCHEDULEDQUANTITY - ESTIMATEDQUANTITY)
	production_order_id	Long	FK			Identifier for the production order	ESTIMATEDQUANTITY.PRODUCTIONORDERNUMBER
	purchase_header_id	Long	FK			References purchase_lines.purchase_header_id	Batch order by-products.Purchase order
	purchase_line_id	Long	FK			References purchase_lines.purchase_line_id	Batch order by-products.Purchase order
	movement_id	Long	FK		Y	The unique identifier of the movement / transaction of the goods in the ERP system	inventTransExportEntity.ReferenceID
	cost	Double			Y	Cost of wasted goods	inventTransExportEntity.(COSTAMOUNTPOSTED/SCHEDULEDQUANTITY) * QUANTITY
	reason	String				Reason for the wastage	"Production" / "Other"
	type	String				Type of waste	"By-Product" / "Other"

About Seeloz

Silicon-Valley-based Seeloz Inc. is the global leader in Supply Chain Automation. Leveraging Artificial Intelligence (AI), Seeloz proudly introduced its Supply Chain Automation Suite (SCAS), the world's first Autonomous Requirements Planning (ARP), redefining supply chain planning across the different types of supply chains.

The ARP autonomously runs supply chain processes without a need for separately generated demand/ supply forecasts and replacing traditional inventory planning typically failing to cope with the complexity, velocity and uncertainty of today's supply chains.

With this breakthrough technology, the ARP demonstrates a substantial boost in operational efficiency for more than twenty industry verticals.

Through PartnerAIM, Seeloz' strong ecosystem of global partners, Seeloz is currently leading the wave of supply chain transformation for governments, multinational corporations and operators of mega supply chains at the global scale.

Through a global partnership with Microsoft, Seeloz proudly offers SCAS solutions leveraging Microsoft Azure.

