CRESCENTONE
ERP DRIVING INDUSTRY 4.0

CONNECTIVITY FRAMEWORK

The CrescentOne Connectivity Framework application exposes CrescentOne business components using open industry standards for integrating CrescentOne (C1v1) with other systems. Connectivity Framework leverages REST web services technology to provide integration for Real-time visibility, transparency and automation of key business processes throughout the supply chain.

A comprehensive solution for real time Connectivity

The C1 Connectivity Platform serves as an integration platform that enables quick integration of on-premises and cloud-based processes, services, applications, events, and data for C1 ERP users. Leveraging Restful web services and Service-Oriented Architecture (SOA), this platform provides a wide array of tools, prebuilt Web APIs, Microservices, and open connectors. These functionalities efficiently link diverse business processes, business intelligence, and supply chain elements, ensuring smooth cooperation between enterprise systems.

Why is a Connectivity Framework Crucial?

Real-time visibility, transparency, and automation of key business processes are paramount for success. A connectivity framework allows businesses, including manufacturers, to connect disparate processes running across the entire supply chain, breaking down silos, and achieving seamless communication. Manufacturers need this capability to decrease response times and automate critical business processes, enhancing efficiency and productivity.

Integrating Data Sources and Systems

C1v1 connectivity framework supports a wide range of standard data sources and facilitates the integration of business processes and data with various systems, such as PLM, CRM, CPQ, and tax compliance systems. A framework like the C1 Connectivity module set offers flexibility and seamless communication between different applications and data sources by utilizing RESTful web services framework and popular data exchange formats like JSON and XML.

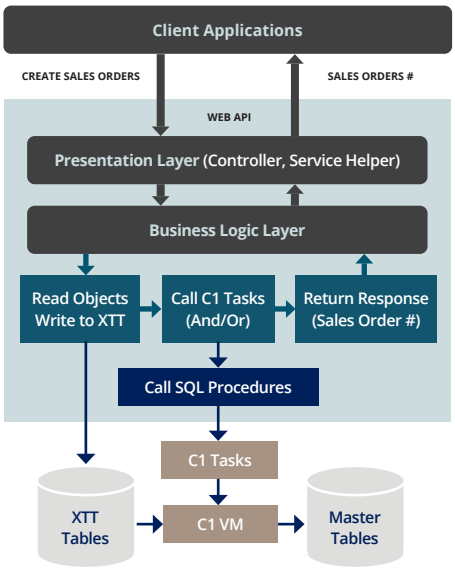
Secured data transfer

The application web services exchange transaction data in the form of secured JSON messages. The application web services interactive documentation is available out of the box and is rendered using Swagger UI Open API definitions.

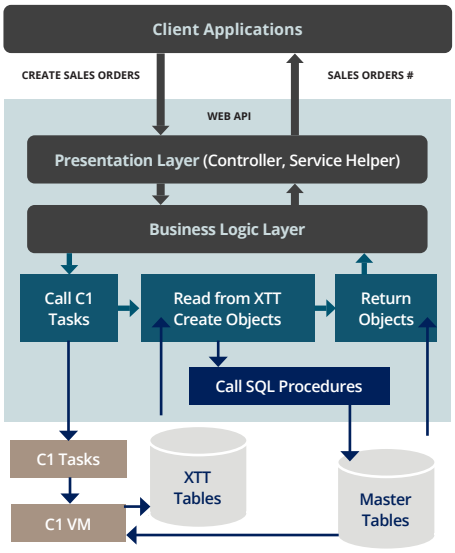
Service calls can be made between Customers or Suppliers and within an organization to share and synchronize data.

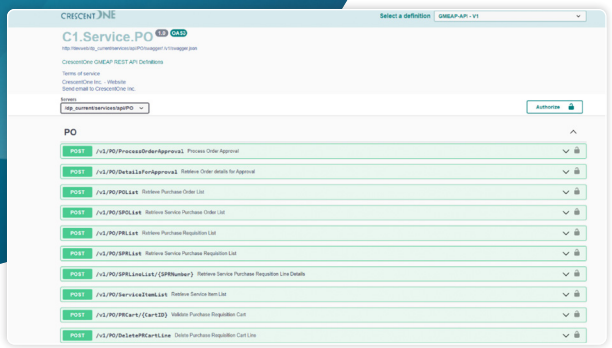
CrescentOne SOA web service calls can be authenticated by passing Authorization Bearer JWT Tokens with encrypted custom payload data in each of request headers.

Inbound API – example Sales Order creation



Outbound API – Retrieve Sales Order details for input Sales Order





REST API documentation is rendered as OpenAPI definitions and can be browsed through a function or GMEAP context using URL such as http(s)://<hostname>/<gmeap_context>/services/api/<module>/swagger/index.html.

Out of the BOX Transactional API

API	Description	Inbound	Outbound
AddSalesOrder	Add Sales Order	Inbound	
AddSimpleSalesOrder	Add a Simple Sales Order	Inbound	
ChangeSimpleSalesOrder	Change a Simple Sales Order	Inbound	
CancelSimpleSalesOrder	Cancel Simple Sales Order	Inbound	
GetSalesOrder	Retrieve Simple Sales Order		Outbound
GetSimpleSalesOrderByPO	Retrieve Simple Sales Order by Purchase Order		Outbound
GetChangedSimpleSalesOrderByPO	Retrieve Changed Simple Sales Order by Purchase Order		Outbound
GetCancelledSimpleSalesOrderByPO	Retrieve Cancelled Simple Sales Order by Purchase Order		Outbound
PackList	Retrieve Sales Order Pack List Details		Outbound
ReceiptAdvice	Perform Receipt Advice	Inbound	
ConsumptionAdvice	Perform Consumption Advice	Inbound	
CreateCustomer	Create Customer	Inbound	
SaveCustomerItemCatalog	Save Customer Item Catalog	Inbound	
GetCustomerItemCatalog	Retrieve Customer Item Catalog		Outbound
SaveCustomerCatalog	Save Customer Catalog	Inbound	
GetCustomerCatalog	Retrieve Customer Catalog		Outbound
AddSalesQuote	Add Sales Quote	Inbound	
ChangeSalesQuote	Change a Sales Quote	Inbound	
GetSalesQuote	Retrieve Sales Quote by Sales Quote Number		Outbound
AddPurchaseOrder	Add Purchase Order	Inbound	
ChangePurchaseOrder	Change a Purchase Order	Inbound	
GetPurchaseOrder	Retrieve Purchase Order Information		Outbound
CreateSupplier	Create A Supplier	Inbound	
AddPurchaseRequisition	Add a Purchase Requisition	Inbound	
GetPurchaseRequisition	Retrieve Purchase Requisition		Outbound
ChangePurchaseRequisition	Change Purchase Requisition.	Inbound	
PurchaseRequisitionConversion	Purchase Requisition Conversion	Inbound	
PurchaseOrderReceipt	Purchase Order Receipt	Inbound	
SaveSupplierItemCatalog	Save Supplier Item Catalog	Inbound	
ProgressiveEngItemReplacement	Replaces a Progressive Engineering Item with the 'As Designed' Item	Inbound	
SaveLocalStructureItem	Save Local Structure Item	Inbound	
GetLocalStructureItem	Retrieve Local Structure Item		Outbound
GetMaterialItemMaster	Retrieve Engineering Item		Outbound
SaveMaterialItemMaster	Save Engineering Item	Inbound	
CreateAPInvoice	Create AP Invoice	Inbound	
CreateEquipmentRegister	Create Equipment Register	Inbound	