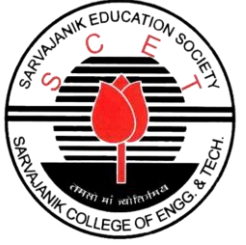




Sarvajnik College of Engineering & Technology

Master of Computer Applications



Commercient **SYNC**

ERP Integration for CRM

Present By:

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Branch: MCA (Sem 4)

Enrollment No: ET22MTCA104

Guide By:

Prof. Zankhana Vaishnav

Introduction

Commercient makes ERP and CRM integration really simple, quick, and efficient. Commercient has helped over 1000+ global companies seamlessly deploy enterprise integrations for ERP, CRM, Sales Automation (SA), and e-commerce by providing an “out of the box” integration solution that can be deployed rapidly with minimal services and overheads.

The integration platform synchronizes 150 + on-premise and cloud ERP systems, including NetSuite, Sage Intacct, Acumatica, Microsoft 365 AX, NAV, SL, Workday, IFS, INFOR, Epicor, ECI, Exact, SAP, Deltek, GlobalShop, IQMS, QAD, Syspro, Plex, QuickBooks, M2M, and many more.



Existing System

Before Commerciant came along, connecting ERP and CRM systems was hard work for businesses. It took a long time to set up, cost a lot of money, and was very complicated.

Companies often had trouble making different systems work together, and there weren't any easy solutions available. This meant that every integration project was unique and didn't always work well. As a result, businesses couldn't use their systems effectively, which made it harder for them to get things done efficiently.



Need for the new System

- **Easy Data Management:** Commercient helps businesses handle and track data easily.
- **Lots of Data:** Businesses have a lot of data, and Commercient helps them handle it well.
- **Need for Efficiency:** Modern businesses need tools like Commercient to work better.
- **Simplifying System Fusion:** Commercient makes it easier for businesses to merge their ERP and CRM systems, ensuring a smoother integration process.



Why should you integrate them?



Why should you integrate them?

ERP (enterprise resource planning) software covers data across your organization. Most eCommerce businesses will benefit from an ERP system, including departments like accounting, human resources, procurement, supply chain management, eCommerce, and more. Examples include SAP, Oracle NetSuite, and Epicor Prophet 21.

Meanwhile, CRM (customer relationship management) platforms help sales and marketing teams. These systems manage information on prospects, customers, and former leads. Examples include Salesforce, HubSpot, and Microsoft Dynamics 365.

Larger businesses need both. CRM platforms have specialized features you won't find in the most popular ERP software, and ERP covers a broader range of company-wide information that would be impossible to calculate with a CRM.



How it works



ERP to CRM

You can integrate your ERP data with your CRM system using our simple one-way SYNC app.



CRM to ERP

CRM data with your ERP system. Commercient SYNC is the easiest application to use to export your CRM data to your ERP system.



ERP And CRM SYNC

Commercient offers a two-way SYNC app designed to integrate both your ERP and CRM data together, creating one master system for easy data access.



Tools & Technologies

Frontend	Shopify, JavaScript, jQuery
Backend	ASP.NET Core, C#, Python
Database	Microsoft SQL Server
Cloud Storage	Amazon S3 Bucket
Development Tools	Visual Studio, VisualSVN, Windows Task Scheduler

Requirement Determination & Analysis

(A)Functional Requirements

Data Synchronization: The system should facilitate bidirectional synchronization of data between ERP and CRM systems, ensuring consistency and accuracy across both platforms.

Customer and Sales Order Integration: Users should be able to synchronize customer information, sales orders, invoices, and payments between ERP and CRM systems seamlessly.

Product and Inventory Management: The system should support the integration of product catalogs, inventory levels, and pricing information between ERP and CRM systems.



Requirement Determination & Analysis

(A)Functional Requirements

Opportunity and Lead Management: Users should be able to synchronize opportunity and lead data between CRM and ERP systems, enabling sales teams to track prospects and opportunities effectively.

Quote and Order Management: The system should enable the transfer of quotes and orders between CRM and ERP systems, facilitating efficient order processing and fulfillment.

Reporting and Analytics: Users should have access to integrated reporting and analytics capabilities, powered by AI-driven insights and predictive analytics models, to generate comprehensive reports and actionable insights based on data from both ERP and CRM systems.



Requirement Determination & Analysis

(B) Non-Functional Requirements

Security: The integration should implement robust security measures to protect sensitive data during transmission and storage, ensuring compliance with data protection regulations.

Performance: The integration should have optimal performance, with minimal latency and efficient data processing to support real-time synchronization between ERP and CRM systems.

Scalability: The integration should be scalable to accommodate growing data volumes and user loads, allowing for seamless expansion without compromising performance.



Requirement Determination & Analysis

(B) Non-Functional Requirements

Usability: The integration should be user-friendly, with intuitive interfaces and clear navigation to facilitate ease of use for employees accessing data across ERP and CRM systems.

Reliability: The integration should be reliable, with built-in error handling mechanisms and failover capabilities to ensure uninterrupted data synchronization and business continuity.

Compliance: The integration should comply with relevant industry standards and regulations, such as GDPR, HIPAA, and SOC 2, to ensure data privacy, security, and regulatory compliance.



Targeted Users

Commercient's target audience spans executives, sales representatives, finance teams, customer service, IT admins, marketers, and operations managers relying on ERP and CRM systems.



Benefits of SYNC

- Increased sales revenue
- Improved customer service
- Better decision-making
- Enhanced collaboration
- Better Analytics and Reporting



Limitations of SYNC

- Complexity and Cost
- Compatibility Issues
- Data Security Concerns
- Dependency on Vendor Support
- Change Management Challenges



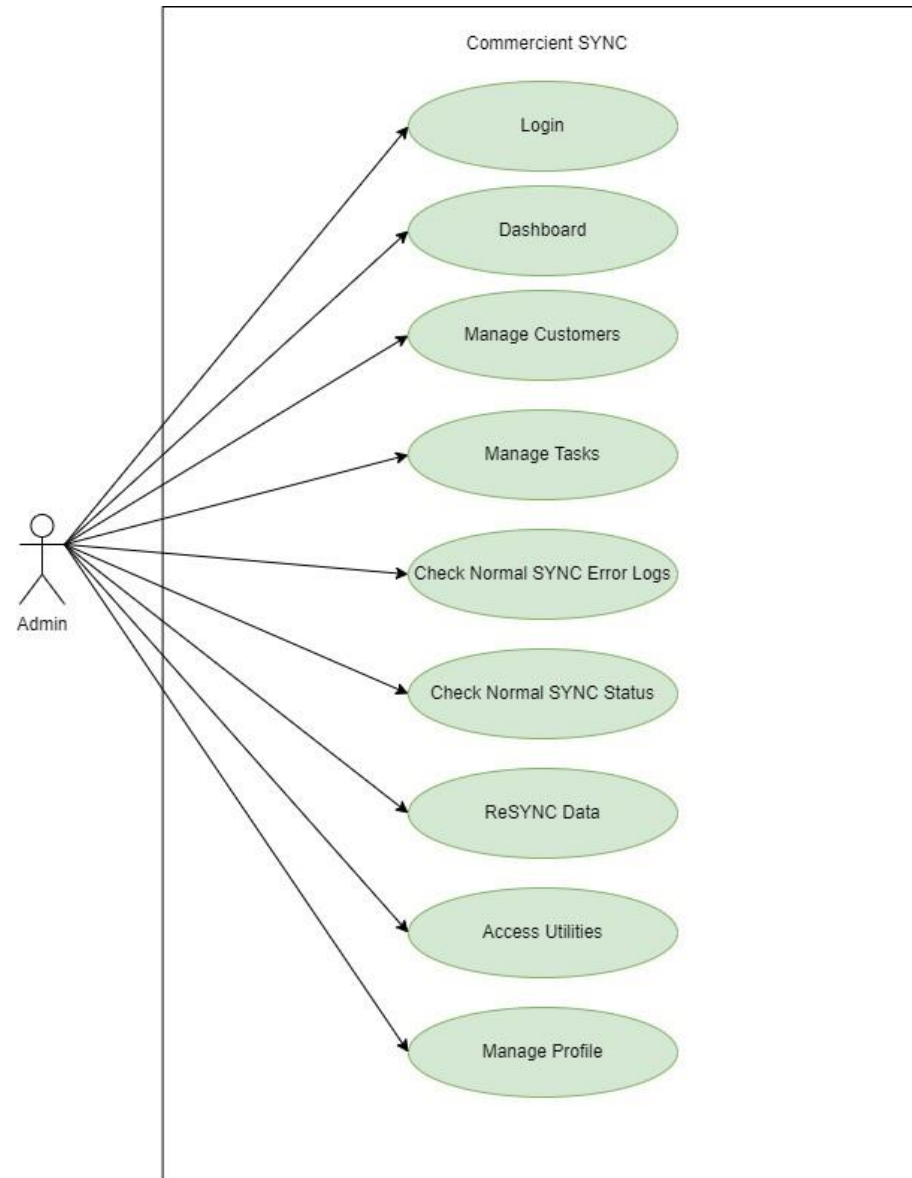
System Design

Use Case Diagram of User



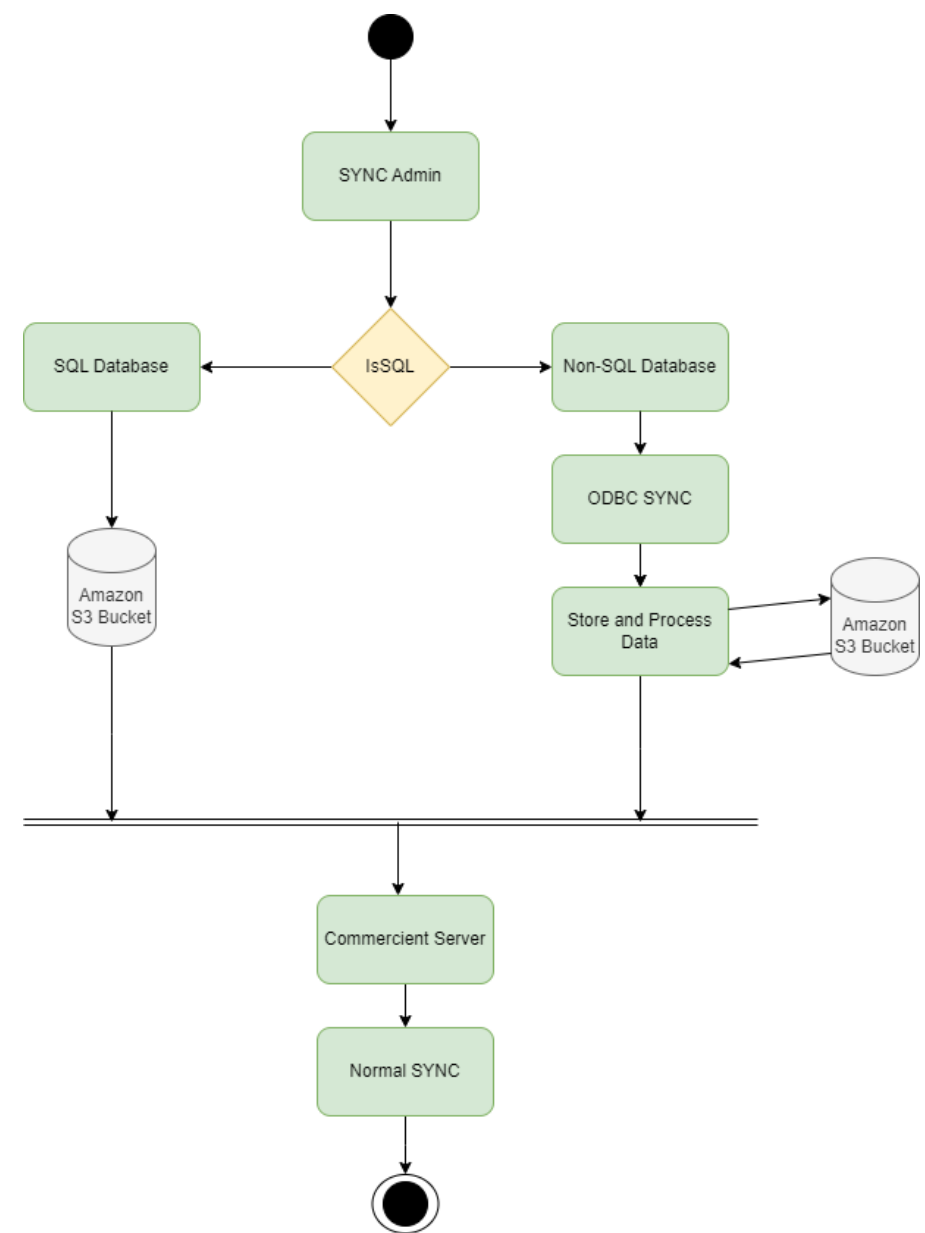
System Design

Use Case Diagram of Admin



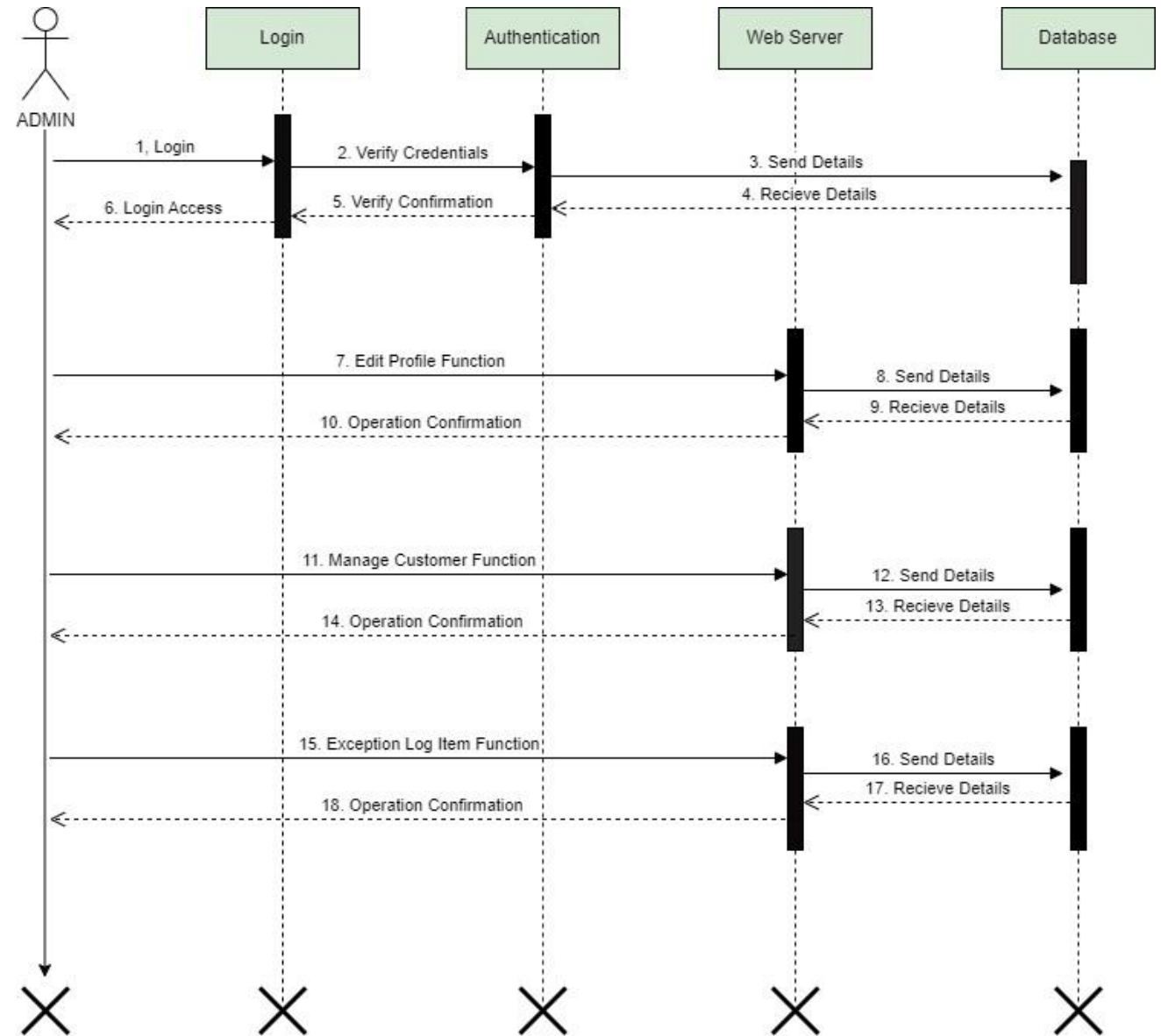
System Design

Normal SYNC Activity Diagram



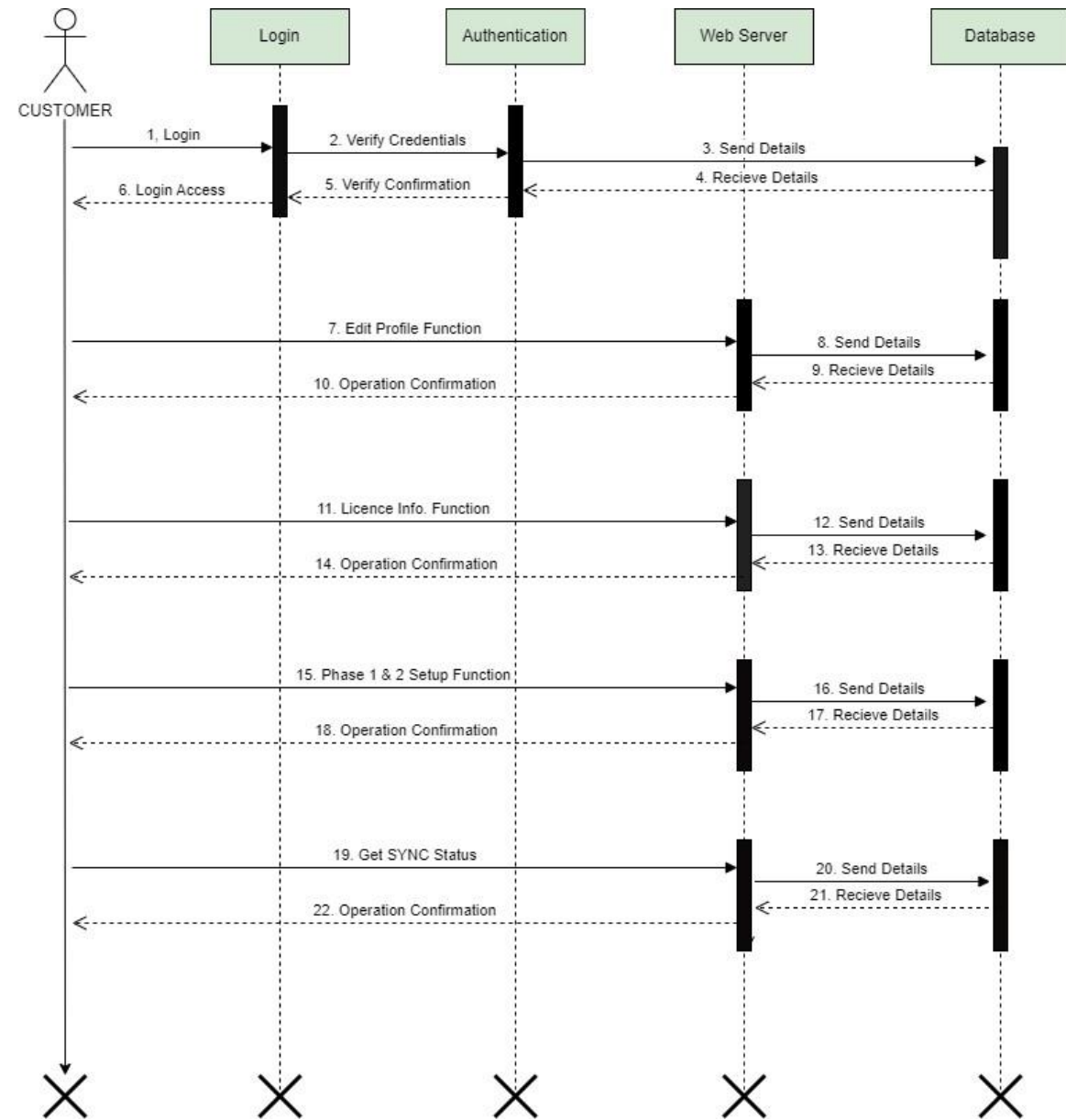
System Design

Interaction Diagram for Admin



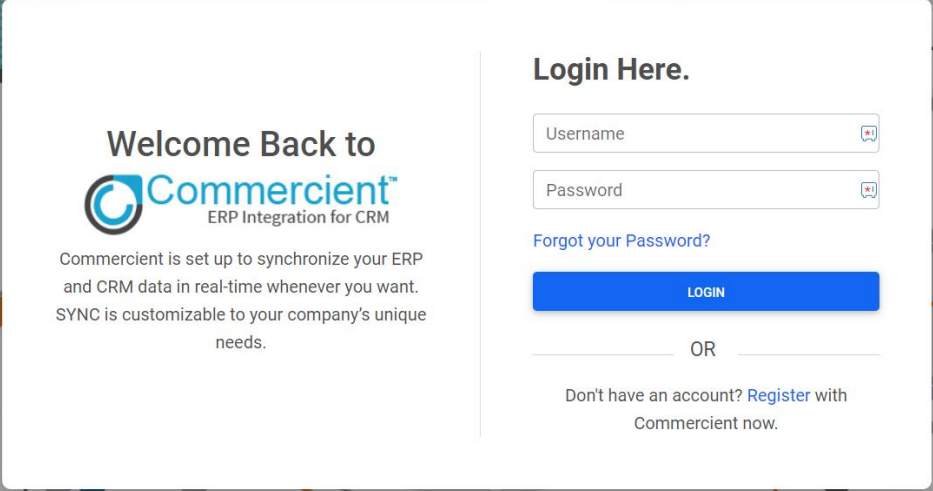
System Design

Interaction Diagram for Customer



System Snapshots

Admin Login



The login form is centered on a white background with a decorative border. The background of the entire slide features a grey field with various business and technology icons like a power button, pie chart, bar chart, globe, and network diagram.

Welcome Back to
Commercient
ERP Integration for CRM

Commercient is set up to synchronize your ERP and CRM data in real-time whenever you want. SYNC is customizable to your company's unique needs.

Login Here.

Username

Password

[Forgot your Password?](#)

LOGIN

OR

Don't have an account? [Register](#) with Commercient now.

System Snapshots

Normal SYNC

Commercient

ERP Integration for CRM

nirmalp@commercient.online

Customer

Basic

ODBC Sync

Normal Sync

NormalSync

NormalSync Log

Sync Tables

NormalSync Error Log

Phase 1 Sync

Phase 2 Sync

HelpDesk

Accounting

Users Management

Alerts

w.tzeng@globescientific.com=>globescientificinc(CRMPRO User)=>MSDYNAMICNAV=>Salesforce

Search Customer

Normal Sync Info

Sql Host Name	ag-synsrv-11b.argus.local
Sql UserName	ODBC_MSDYNAMICNAV_globescientificinc
Sql Password	Contact Support Team
Sql Database Name	ODBC_MSDYNAMICNAV_globescientificinc
Sql Schema Name	
MachineName	AG-SYNCSRV-13B
DomainName	WORKGROUP
Path	H:\JB Normalsync program\Customer
Version	4.0.0.7
ProgramStartDate	2/29/2024 5:31:07 PM
Batch Size	200

SAVE BATCH SIZE

System Snapshots

Normal SYNC

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Normal Sync Commercient Information

Normal Sync takes data from customer database and put it here.

RESYNC DATA

MANNUAL RESYNC

Table Name	Record Count	Customer DB	Search	Action
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Contact	15613	15613	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Customer	15717	15717	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Item	6546	6546	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Sales_Cr_Memo_Header	7049	7049	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Sales_Cr_Memo_Line	46683	46683	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Sales_Header	3022	3022	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Sales_Invoice_Header	331386	331386	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Sales_Invoice_Line	1471824	1471824	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Sales_Line	14271	14271	SEARCH	RESYNCDELETE STRUCTURE & RECORD
SF_ERP_Salesforce_Clone_Globe_Scientific__Inc__\$Sales_Price	251269	251269	SEARCH	RESYNCDELETE STRUCTURE & RECORD

System Snapshots

Normal SYNC

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w.tzeng@globescientific.com=>globescientificinc(CRMPRO User)=>MSDYNAMICNAV=>Salesforce

Search Customer

NormalSync Logs Data Process

1	Total Data := 0
2	Completed Data := 0

100% Complete (success)

REFRESH

NormalSync Logs

No	Log Message
1	Information 2/29/2024 5:31:06 PM w.tzeng@globescientific.com: Normal Sync Step 1 : ERP_SQLHOSTNAME = ag-synsrv-11b.argus.local ERP_SQLUSERNAME = ODBC_MSDYNAMICNAV_globescientificinc ERP_SQLDATABASE = ODBC_MSDYNAMICNAV_globescientificinc Sync_Both = 0 Sync_Commercient = 0 Sync_SFDC = 1 SchemaName = dbo ETC_SYNCSERVICE_STATUS = STOPPED NORMAL_SYNCSERVICE_STATUS = RUNNING
2	Information 2/29/2024 5:31:06 PM w.tzeng@globescientific.com: Normal Sync Step 1: Initialization Completed
3	Information 2/29/2024 5:31:06 PM w.tzeng@globescientific.com: Normal Sync True
4	Information 2/29/2024 5:31:06 PM w.tzeng@globescientific.com: Normal Sync Step 4 : ERP Initialization Started
5	Information 2/29/2024 5:31:08 PM w.tzeng@globescientific.com: Normal Sync Step 4 : ERP Initialization Completed



System Snapshots

Normal SYNC

Commercient

ERP Integration for CRM

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Customer

Basic

ODBC Sync

Normal Sync

NormalSync

NormalSync Log

Sync Tables

NormalSync Error Log

Phase 1 Sync

Phase 2 Sync

HelpDesk

Accounting

Users Management

Alerts

w.tzeng@globescientific.com=>globescientificinc(CRMPRO User)=>MSDYNAMICNAV=>Salesforce

Search Customer

NormalSync Logs Data Process

1	Total Data := 0
2	Completed Data := 0

100% Complete (success)

REFRESH

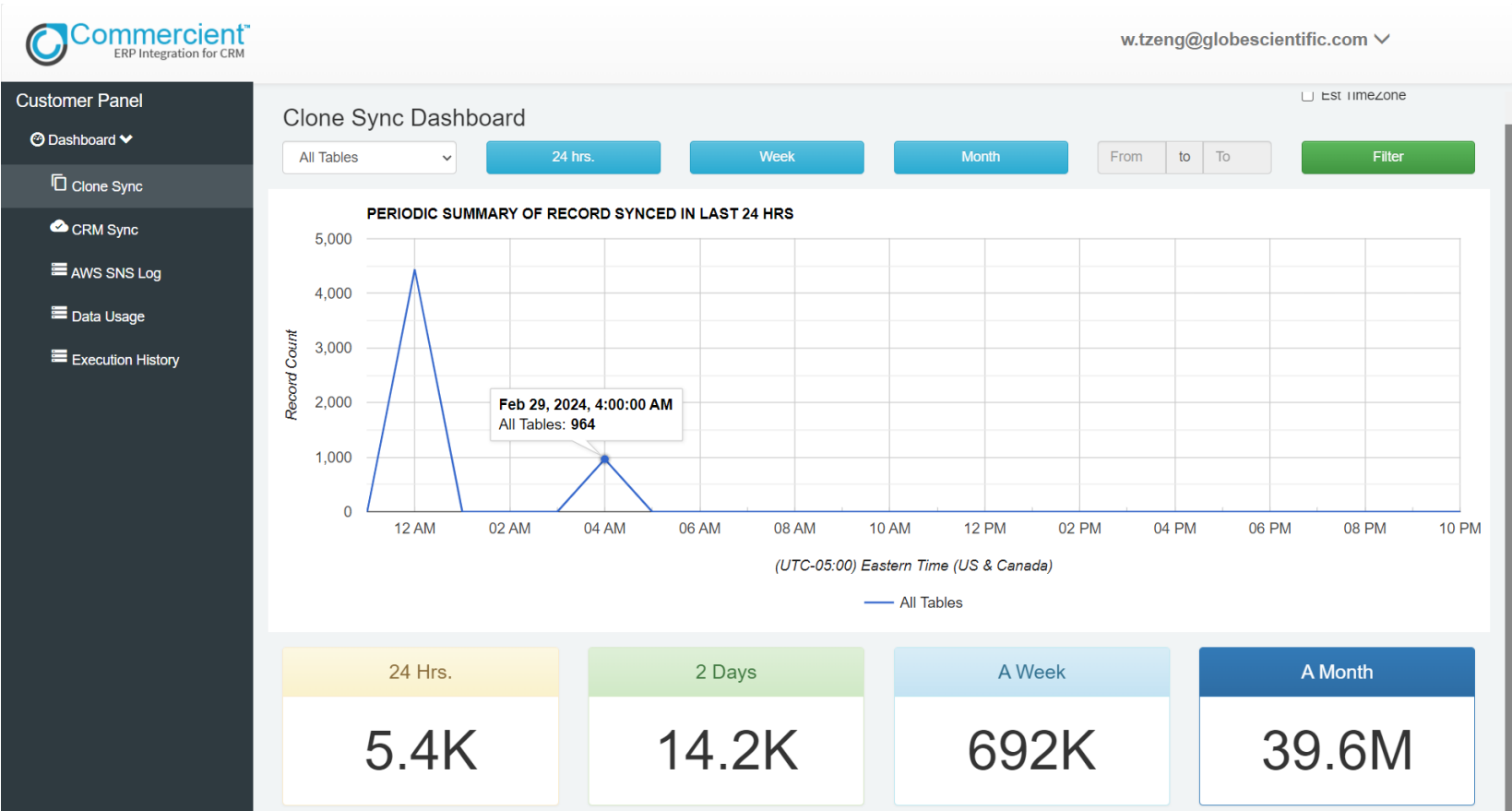
NormalSync Logs

No	Log Message
1	Information 2/29/2024 5:31:06 PM w.tzeng@globescientific.com: Normal Sync Step 1 : ERP_SQLHOSTNAME = ag-synsrv-11b.argus.local ERP_SQLUSERNAME = ODBC_MSDYNAMICNAV_globescientificinc ERP_SQLDATABASE = ODBC_MSDYNAMICNAV_globescientificinc Sync_Both = 0 Sync_Commercient = 0 Sync_SFDC = 1 SchemaName = dbo ETC_SYNCSERVICE_STATUS = STOPPED NORMAL_SYNCSERVICE_STATUS = RUNNING
2	Information 2/29/2024 5:31:06 PM w.tzeng@globescientific.com: Normal Sync Step 1: Initialization Completed
3	Information 2/29/2024 5:31:06 PM w.tzeng@globescientific.com: Normal Sync True
4	Information 2/29/2024 5:31:06 PM w.tzeng@globescientific.com: Normal Sync Step 4 : ERP Initialization Started
5	Information 2/29/2024 5:31:08 PM w.tzeng@globescientific.com: Normal Sync Step 4 : ERP Initialization Completed



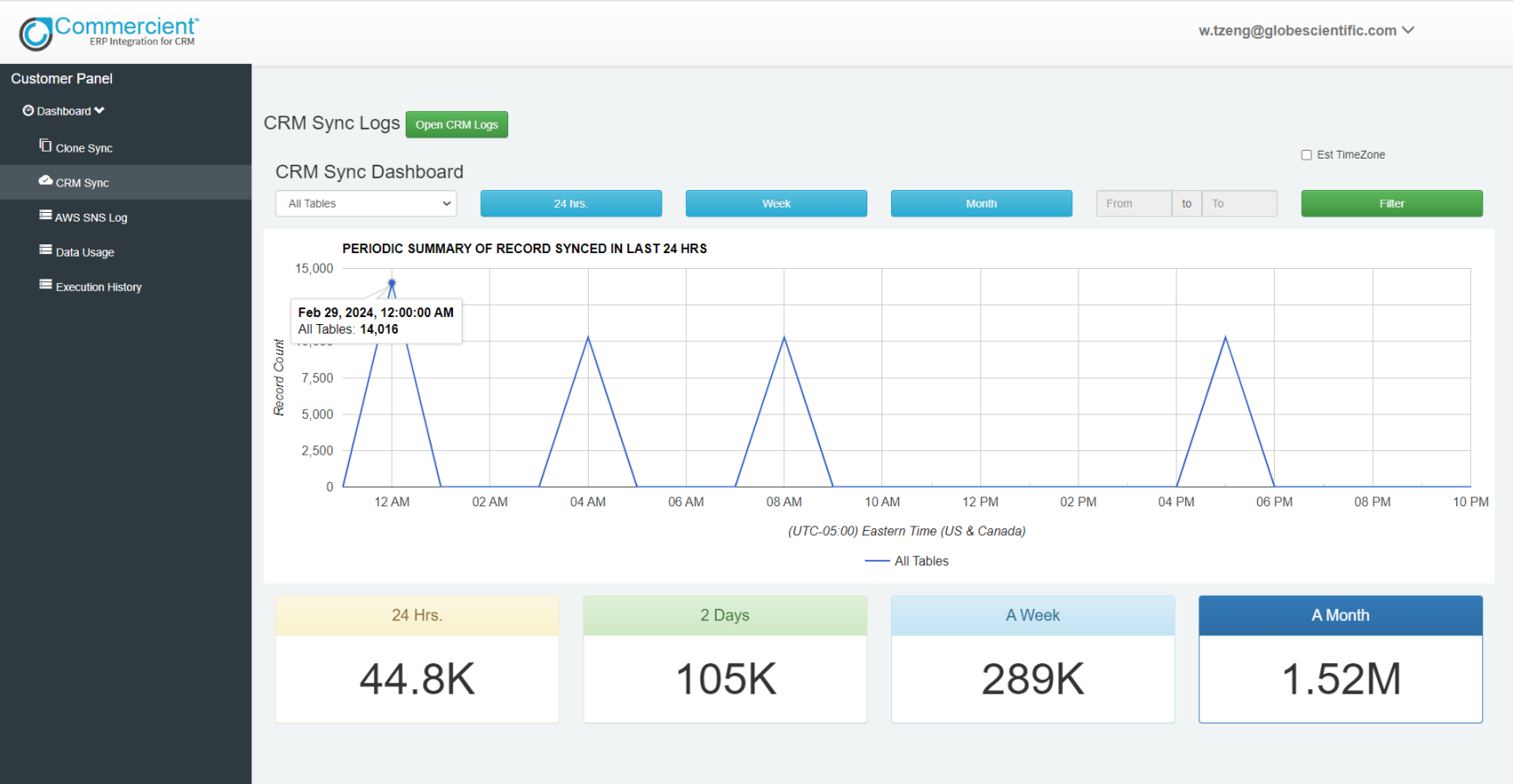
System Snapshots

Customer SYNC Dashboard




System Snapshots


CRM SYNC Dashboard





System Snapshots


Mojo Tickets


 **Commercient™**
ERP Integration for CRM


nirmalp@commercient.online 


 Admin Portal


 Customers


 Dashboards



 Exception Reports

 AI Tools

 Support Guide

 Utilities

 Psychological Consultancy Ltd - Commercient ODBC Sync Server

  EDIT

task disabled


Info - created on 2/27/2024

Hi there. We are facing issues in new installations where the Commercient ODBC Sync Server task is disabled by default after we finish installation. Can you please check further, and give us a hand with this instance and enable the task? We got data in the bucket but have not landed on the Normal Sync tables yet. Thank you in advance.

REPLY

Jason - commented on 2/27/2024 10:27:32 AM

To : nirmalp@commercient.online,jasons@commercient.online



Task Status : changed from Not Initiated to Completed

Status : Completed

Priority : Normal

Assign To : Nirmalp

Start Date : 2/27/2024


Due Date : 3/5/2024

Attachment : [Open](#)



System Snapshots

Exception Logs

 **Commercient™**
ERP Integration for CRM

Admin Portal

Customers

Dashboards

Exception Reports

CloneSync LastUpdate

CloneSync TotalRecords

Exception Log Items

Web Errors

AI Tools

Support Guide

Utilities

Exception Log Items Records Report

Enter Customer Email

FILTER

Customer	LogDateTime	Message	StackTrace	EventId
item West	2/29/2024 10:34:16 PM	set SNAPSHOT_ISOLATI...More	More	55190771
Wattbike Ltd	2/29/2024 10:28:07 PM	set SNAPSHOT_ISOLATI...More	More	55190767
Quest Safety Products, Inc.	2/29/2024 9:00:40 PM	STEP 8: Exception wh...More	...More	55190750
HPM Building Supply	2/29/2024 8:02:56 PM	STEP 8: Exception wh...More	...More	55190743
HPM Building Supply	2/29/2024 8:02:55 PM	STEP 8 : API ERROR W...More	...More	55190742
Meditek	2/29/2024 7:00:36 PM	Step 5: lowSync_SF_E...More	...More	55190730
Maxcess International	2/29/2024 7:00:02 PM	Step 8 : WCF Except...More	Server stack trace: at ...More	55190729
Dickson Furniture sandbox	2/29/2024 7:00:01 PM	Step 8 : WCF Except...More	Server stack trace: at ...More	55190728



Proposed Enhancement

In Existing system, if the customer have problem with sync they refer the blogs or documentation but in proposed system, the latest LLM Model works on the previous tickets and documents and based on that data providing the solution and automate the sync process also predicts the future tends and increase the sales.



Conclusion

In conclusion, the CRM and ERP integration tool offers streamlined operations, informed decision-making, and enhanced customer engagement. By combining CRM and ERP functionalities seamlessly, it provides organizations with a comprehensive solution to optimize processes and stay competitive in the market.



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- <https://www.sap.com/india/products/erp/what-is-sap-erp.html>
- <https://www.youtube.com/channel/UC92x63Cete3v0erwL3JOJEA>





Thank you