

Breaking Down Data Silos

7 Steps to Improve Operational Efficiency by
Unifying Contact Center and CRM Data



Table of contents

A guide to unifying your contact center applications

The 7 steps toward operational efficiency

Step 1: Decide agent productivity level needed

Step 2: Decide manager productivity level needed

Step 3: Decide administrator efficiency level needed

Step 4: Understand available component APIs

Step 5: Know user interface flexibility

Step 6: Evaluate deployment architectures

Step 7: Determine deployment integration strategy

Conclusion

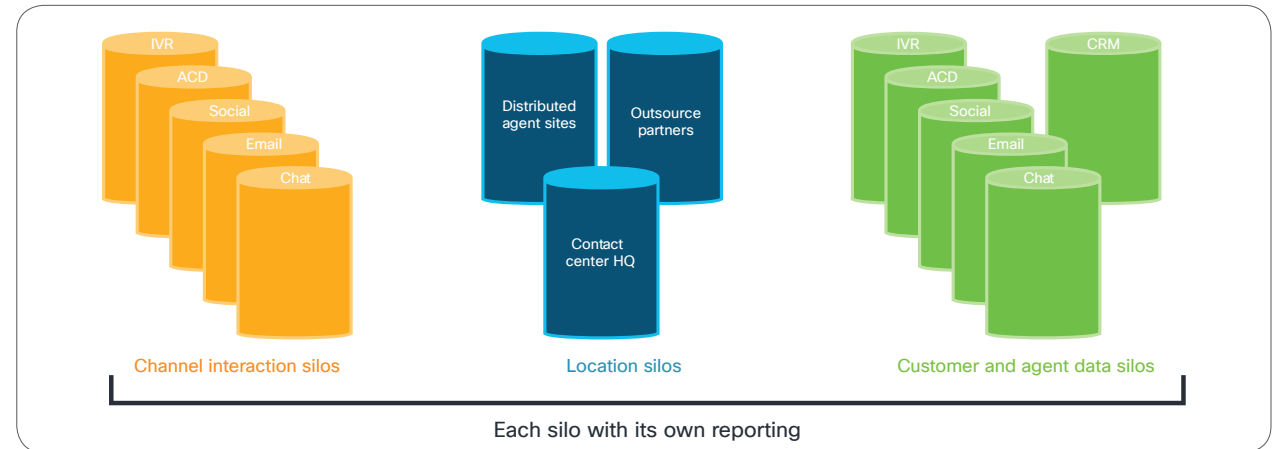
A guide to unifying your contact center applications

Who should read this

This e-book is for contact center management and business executives looking for ways to **increase the efficiency and productivity** of their contact center.

- **If yours is an existing contact center** with infrastructure that has been built up over the years, this e-book provides best-practice steps to break down the resulting application silos, unify them, and improve the operational efficiency of your contact center.
- **If yours is a new contact center** and you have the opportunity to build your infrastructure from the ground up using modern technologies, this e-book will provide best practices to prevent building application silos.

Figure 1. Application silos of the contact center



The emergence of application silos in contact centers

Over the years, as “call centers” have evolved into “contact centers”—acting as the front line of interaction with customers for sales, service, and capturing customer information—application silos have emerged created by new channels, distributed locations, new sources of customer data, and different reporting capabilities.

Many agents are no longer housed together in one location, but are distributed globally—some working from home and some managed by outsourcing partners.

While voice remains the communication method of choice for the large majority of consumers, email, chat, and video channels are gaining acceptance.

At the same time, sophisticated Customer Relationship Management (CRM) applications that capture every customer interaction and case in detail are replacing simple order-entry systems.

As a result, in some companies, agents use one system to make and receive calls, another to send and receive emails, another for chat conversations, and a CRM to capture information about each customer interaction.

This evolution has resulted in silo applications, duplicated in multiple sites that usually do not work in sync. This has created an environment in which agents juggle multiple applications concurrently, administrators set up and maintain multiple systems, and managers jump back and forth between applications to monitor contact center activity. So while each system was implemented to increase productivity and efficiency, their lack of integration has produced functional redundancies and inefficiencies.

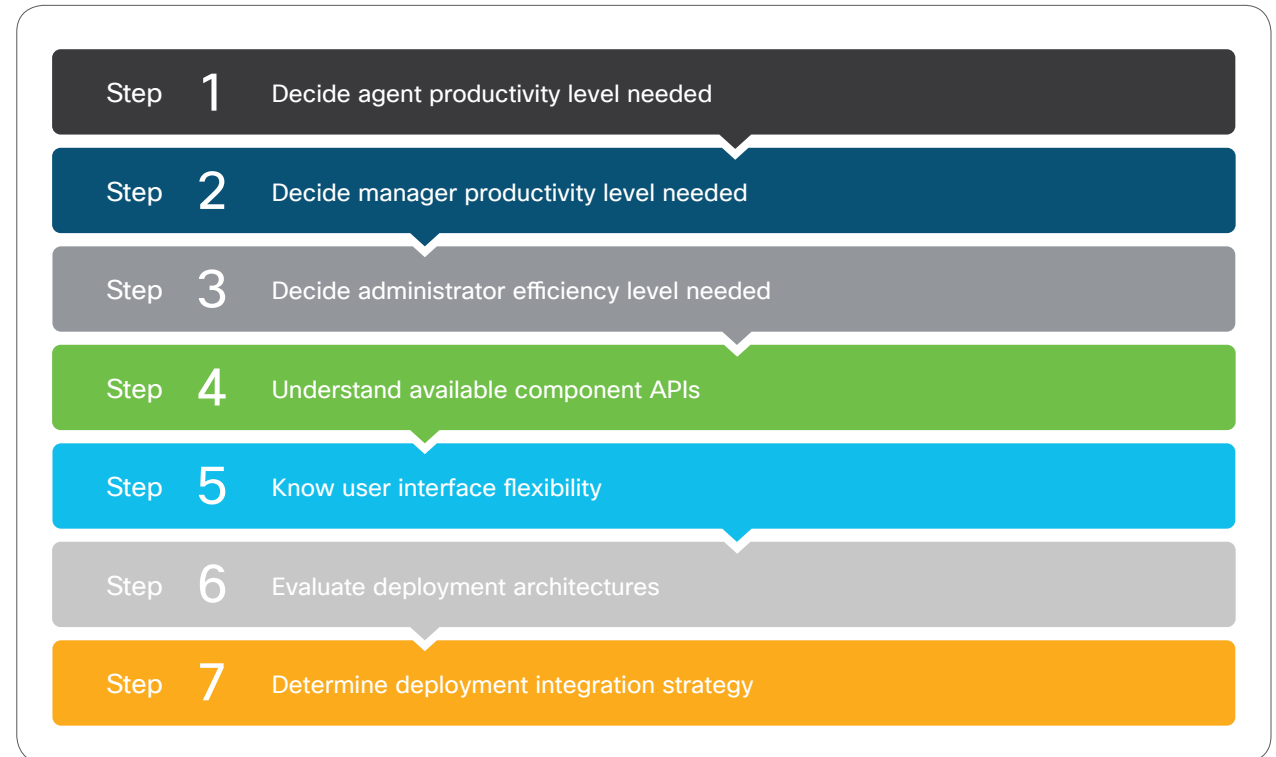
The 7 steps toward operational efficiency

Unifying the call management and CRM applications, and their respective email and chat capabilities, can improve the day-to-day productivity and efficiency of contact center agents, managers, and system administrators by reducing functional redundancies and the number of applications each has to contend with.

This unification can also benefit the customer. By integrating the systems, each system can share the data they collect and trigger each other so that the pertinent customer information is displayed to the agent as they interact. This provides more context for the agent when servicing the customer and delivers a better-quality customer experience.

Here are 7 steps to start the process to break down the application silos that have emerged in today's contact centers and improve their operational efficiency.

Figure 2. 7 steps to improve operational efficiency by unifying contact center and CRM data



Step 1

Decide agent productivity level needed

Agents are the core of the contact center, so making them more efficient is key.

Step 1 is to determine what level of application unification you want to offer your agents.

Agents have a minimum of two applications they must be logged into every day:

- CRM, order entry, or equivalent to access customer data, purchases, and case histories
- Automatic Call Distributor (ACD), email, or chat system—whichever supports their method of communication

Omnichannel agents may have to log in to more systems, depending if email and chat are supported in the CRM or ACD.

Unifying these systems to reduce the number of systems an agent has to interact with every day can deliver significant productivity gains.

Table 1 outlines three levels of application unification for agents.

Agent productivity and efficiency is at the core of improving overall contact center operations.

Table 1. Agent unification levels

Level	Type	Definition	Examples
Screen pops	Data	When a customer gets routed to the agent, a “screen pop” displays customer data to the agent in a new screen.	<ul style="list-style-type: none"> • Basic: customer name and contact and account information • Interactive Voice Response (IVR): the selections the customer made to reach the agent • Interaction history: past interactions in that channel, issues, and product interests • Current case: the case regarding which the customer is calling (captured in the web or IVR session) • Cross-channel: data about past chat, email, and phone conversations
Auto-logging	Data	Systems automatically write data to each other.	<ul style="list-style-type: none"> • ACD automatically logs calls and wrap-up codes in an omnichannel, CRM, or order-entry system • IVR automatically logs data to CRM and ACD
Single UI	Data and function	All communication channels, CRM data, and functionality are provided within one agent environment.	All of the above

Step 2

Decide manager productivity level needed

Contact center managers have to do the most balancing to maintain a complete picture of everything going on in the contact center.

For managers, data unification becomes very important.

- The voice (ACD), email, or chat systems provide the **quantitative data** such as interaction volumes, size of queues, wait times, speed of answer, length of interactions, and wrap-up codes.
- The CRM or order-entry system has the **qualitative data** about the value of sales being made, if there are issues such as service outages or product malfunctions, and whether or not cases are being resolved during the first calls.

Like agents, managers often have to jump from system to system or report to report to get a complete picture of what is going on in the contact center. This requires logging in to various systems and consolidating reports to get a complete view of contact center operations, making it challenging to respond to changes in demand to maintain service and performance levels. For manager efficiency, there are four levels of unification you can provide.

Table 2. Manager unification levels

Level	Type	Definition	Examples
Cross-system reporting	Data	Periodically generated reports that provide historical data from multiple systems about service levels and performance across channels	Reports that map quantitative data such as wait times and calls handled by sites, teams, and agents to qualitative data regarding which products and services the calls were about, first-call resolution rates, call quality, sales, conversion rates, dollar values, and which agents and teams performed well
Real-time dashboard	Data	Dashboards that display real-time data about service levels and performance across channels and systems	Dashboards that display quantitative data such as calls in queue and calls in progress by sites, teams, and agents mapped to qualitative data regarding which products and services the calls are about, service issues, first-call resolution rates, call quality, real-time sales figures, conversion rates, dollar values, and which agents and teams are “hot” and which are not
Routing	Data	Empowering the manager to set up routing strategies that use data from multiple systems	Using data in the CRM to prioritize customers or route to special agents
Single UI	Data and function	All data, routing functionality, and quality management tools within one environment in which the manager works	All of the above with call monitoring and recording all in the same user interface

Step 3

Decide administrator efficiency level needed

Contact center administrators have their hands full keeping a variety of systems and equipment online and working in sync.

Many of the administration functions are redundant between systems, such as setting up users, skills, roles, and wrap-up codes. In other cases, data in one system need to be referenced while setting up another. For example, the ACD has the routing rules, but the CRM has the customer, case, and qualitative data about site, team, and agent performance that you may want to use to drive routing strategies.

The more integration you are able to achieve between your systems, the easier the system administrator's job becomes to maintain them.

In many unification strategies, administrator efficiency is overlooked, but when properly empowered, administrators can make a significant impact on the efficiency of contact centers by optimizing routing strategies and resource usage.

Table 3. Contact center administrator unification levels

Level	Type	Definition
Users	Data	Users, roles, and permissions can be shared between the systems, only having to be defined in one place.
Routing	Data	The ACD and IVR can leverage the customer, case, and agent performance data in the CRM for routing strategies.
Single UI	Data and function	All provisioning, administration, queue management, and routing strategies are provided in a single UI.

Step 4

Understand available component APIs

More modern systems, particularly those available in the cloud, are built as “open platforms” or with an “open architecture.” By definition, “open” means these systems can integrate with systems built by other vendors. These systems have published or accessible Application Programming Interfaces (APIs) that allow their various internal components to communicate with other systems, triggering events or actions to occur in other systems and vice versa.

Learn what APIs you have to work with and how you can leverage them.

Talk to your IT team and vendors to understand what options you have to work with.

Table 4 outlines the four kinds of APIs that are most important for contact center system unification.

Some vendors:

- Use their APIs to provide “off-the-shelf” integrations with other products
- Publish these interfaces so you can do the integration yourself
- Offer the integration as a custom service

Table 4. Four key contact center system APIs

APIs	Audience	Usage examples
Agent desktop	Agents	<ul style="list-style-type: none"> ▪ Driving screen pops ▪ Call management; hold, transfer ▪ Smooth omnichannel transitions ▪ Automatic call logging between systems ▪ Automatic customer data logging between systems
Provisioning	Administrators	<ul style="list-style-type: none"> ▪ Users, roles, permissions ▪ Queue management ▪ Deployment to different sites and outsourcers
Call routing	Managers and administrators	<ul style="list-style-type: none"> ▪ Routing rules ▪ Omnichannel management ▪ Customer prioritization ▪ Customer and agent matching
Reporting	Managers and executives	<ul style="list-style-type: none"> ▪ Unified cross-system reports and key performance indicators ▪ Periodic reports ▪ Real-time dashboards ▪ Event alerts and messages

Step 5 Know user interface flexibility

Modern Graphical User Interfaces (GUI or UI) should be built using APIs. When properly built using modern techniques, a button a user clicks within an application calls an API that triggers a functional component to do the task associated with that button.

If these APIs are published and the layout of the UI is customizable, this capability can be used to add buttons within one application's UI that call APIs that trigger functional components in other systems.

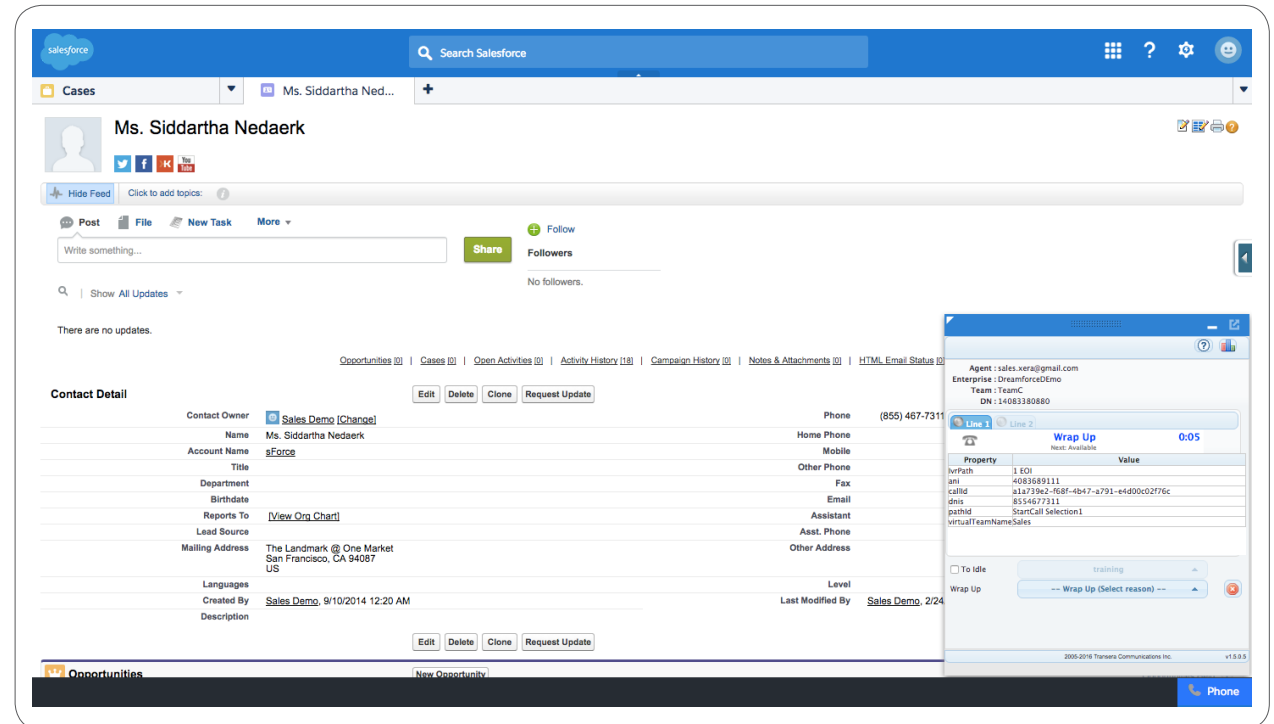
As with APIs, some vendors provide a lot of flexibility to adapt their UIs yourself, others offer the customization as a service, and some have already used the APIs to provide “off-the-shelf” integrations.

It is important to understand how customizable the user interfaces in your various systems are. Talk to your IT team or your vendors and understand what options you have.

Things to ask your IT team and vendors:

1. Can you move, add, delete, or replace UI buttons?
2. Can you customize which APIs sit behind UI buttons and which components they call?
3. Can you add buttons that use APIs to call components of other products?

Figure 3. The Salesforce Sales and Service Clouds are good examples of CRMs with customizable UIs



Step 6

Evaluate deployment architectures

Most contact centers are still using on-premises systems for their call management and CRM. These applications were licensed years, if not decades, ago and are entrenched in the company's infrastructure. If so, they may not have been built with the openness of newer technologies. If you are committed to breaking down silos, then you may want to consider either replacing some of these systems with a cloud-based system or adding a cloud-based system on top of your existing systems to create a hybrid environment.

There are four physical architectures for contact center systems, with varying degrees of "openness" for integrated unification, which are defined in the following table.

Table 5. Deployment architecture options

Architecture	Definition	Degree of openness
On-premises	On-premises systems are physically installed on equipment at your various sites—this is the most common for systems that have been around for a while.	Fair
Hosted	In the hosted scenario, a vendor or service provider is hosting an "on-premises" system for you at their data center and you access the system remotely.	Fair
Cloud or Software-as-a-Service (SaaS)	SaaS systems are originally designed to be available via the Internet from anywhere, at any time, from any device (such as a web browser, tablet, or phone). They require no special onsite equipment as the vendor hosts them. Because these systems were built in the past 10 to 15 years, SaaS applications are most likely to be "open" and have the most opportunity for integration and customization.	Excellent
Hybrid	This is an architecture that combines SaaS and on-premises or hosted systems. Because SaaS applications are designed to be open, they are often able to integrate with on-premises systems and create a "hybrid" environment. For example, this approach can be useful if you want to create a single, global queue that routes calls to on-premises equipment to manage service levels globally.	Good to excellent

Step 7

Determine deployment integration strategy

What you learn in step 6 about your existing systems or those you are evaluating and what you decide during steps 1 to 3 will determine how you proceed in your unification effort.

To accomplish a significant level of integration, you will most likely want to bring some level of cloud technology to your contact center systems.

This table describes the two most common integration strategies and when and why you might select them.

Table 6. Deployment integration strategies

Architecture	Definition	Audience	Advantages
Cloud or SaaS	All systems available via the Internet from anywhere, at any time, from any device (such as a web browser, tablet, or phone)	<ul style="list-style-type: none"> • New contact centers • Existing contact centers looking to replace on-premises or hosted systems with more modern technology 	<ul style="list-style-type: none"> • Creates less IT burden and administration • Requires no special onsite hardware • Requires annual subscription instead of high-cost perpetual license • Lowers cost of ownership
Hybrid	Adding SaaS applications to work in conjunction with on-premises or hosted systems	<ul style="list-style-type: none"> • Existing contact centers that want upgraded functionality and flexibility, but have a significant investment in on-premises or hosted systems that will be expensive to replace • Contact centers with multiple outsourcers that need to use their own systems 	<ul style="list-style-type: none"> • Maintains investment in existing systems • Adds modern functionality such as global queues for routing • Improves control and performance of existing systems

Conclusion

There are some great productivity gains to be achieved by breaking down the functional silos of your call management and CRM systems.

Improving the productivity and efficiency of agents, managers, and administrators can make a significant impact on your contact center's bottom line.

By going further and breaking down the data silos of your contact center systems, you can move beyond operational efficiency and cost reduction to become a strategic contributor to the overall business of your company.

When you offer a better-run contact center focused on business performance optimization that dynamically changes to meet the needs of the market, the real winner is your customer. They get the service they need, when they need it, in the most efficient way possible. And isn't that the real goal?

Let Cisco help you break down your data silos

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