

WHITE PAPER

A Winning Combination –
The SQL Database and The
Web-based Service Desk

Improving the Customer Support Experience Through Instant Service Desk Access to
Up-to-the-Minute Data Stored in SQL Databases

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Introduction

Today, as never before, service and support organizations must centralize information, processes, policies, and data to provide service levels that satisfy customers, meet management expectations, and increase overall business values. To do this, they must successfully centralize their service and support operations, and link many disparate data sources, including decentralized databases, corporate directories, and back-office applications offered by various vendors such as Microsoft®, Sun™, Novell®, and other third-party vendors. And, they must do this while working with increased responsibilities, tighter IT budgets, and often, smaller staffs.

Customers expect instant support and service desks are constantly challenged with finding new ways to speed and improve the customer service experience. By capturing data through person-to-person interactions, service desk agents can improve the quality of their service and better control the problem resolution cycle. The more accurate, relevant information they have to work with, the easier it is to troubleshoot and solve issues. However, given the time and cost factors associated with engaging a live agent, organizations are increasingly seeking ways to streamline and automate how data related to the service delivery process is gathered, logged, and accessed.

Regardless of an organization's size and industry type, it must rely on a range of systems and applications to drive business. Whether off-the-shelf, custom-developed, or any flavor of an enterprise resource planning (ERP) solution, SQL-based databases are widely used today as they offer a standards-based platform to manage data.

SQL databases can provide three distinct benefits to the service desk. The first is the strong performance and scalability gains inherent in storing data, such as contact records, customer service contract, asset, and other data, in SQL-based repositories. Secondly, with a dynamic link, service desk personnel can quickly access the latest address book records stored in SQL directories, eliminating the need for managing and updating multiple data sources. The third advantage is that SQL databases allow organizations to integrate non-address book data stored in SQL-based applications and dynamically insert specific information, such as account numbers, asset tags, or insurance identifications, into the service and support process and pre-populate trouble tickets. This allows agents to automatically capture specific information and accelerate customer problem resolution.

This paper will provide an overview on how SQL databases can be utilized within modern service desk environments to improve agent workflow, optimize support operations, and speed customer problem resolution.

A Primer on SQL

Before exploring the benefits of SQL and how it can significantly impact and improve service desk operations, it is important to understand what this acronym represents. SQL, short for Structured Query Language, is a standard computer language developed in the mid-1970s and used by relational databases to query, update, and manage data.

Unlike proprietary databases, SQL has become the industry standard because it allows information stored in one database to be imported and exported into another. This popular language helps define and manipulate data in Oracle®, Microsoft® SQL Server, MySQL®, Postgres, DB2, and other relational database systems.

First Generation Service Desks

Early service desk solutions typically utilized proprietary databases – not SQL-based solutions – to track and manage customer data. While these solutions offered some advantages, at some point, they reached their limit, impacting performance and perhaps impeding the service desk's ability to adequately support its workload. Additionally, proprietary databases cannot be easily integrated with other applications and data, making them inflexible to support growth, expansion, and changing business requirements.

SQL-Powered Service Desks

It is important to look for a modern service desk solution that incorporates the use of SQL-based databases for storage of trouble-tickets, address books, and asset data, enabling the service desk to track and manage larger volumes of information, and have the flexibility to manipulate that information. As an organization's needs grow, SQL-powered service desks can be easily scaled, offering a high-performance platform that enables virtually unlimited growth of agents, ticket volumes, and any combination thereof.

Improving the Service Desk Experience

Having the need to call a service desk typically means you have a problem and need help resolving it fast. This situation is stressful enough, and can make even the calmest person anxious when they have to repeat specific information to an agent to describe a problem, especially when multiple calls are made or several agents are involved in the process.

Using an advanced SQL-based service desk, an agent can automatically capture the profile of the customer or employee requesting help (and/or can be configured to capture specific information about this person), eliminating the need to ask time-consuming or redundant questions. This process not only saves time and improves data accuracy, but it also proactively enables agents to manage the problem resolution process, reducing costs and eliminating inefficiencies.

Extending SQL to the Service Desk

Organizations can realize significant time and cost efficiencies when integrating their service desk with existing SQL-based systems, such as ERP applications. Systems such as SAP® and PeopleSoft® manage SQL-based customer databases. By dynamically linking, in read-only mode, to those databases – for automatic retrieval of customer data – the service desk can improve performance, while sharing the IT organization's existing customer data. Some examples of how organizations use this process include accessing customer contact records, retrieving employee data from an ERP system, locating asset data for pc assets and other data types, and finding relevant insurance data from an insurance database.

Dynamic Access to the Latest Customer Records Stored in SQL Directories

Linking your service desk via SQL to existing customer record databases, whether in SAP, PeopleSoft, eRMA, or another custom-developed Oracle or Microsoft SQL Server-based database enables you to leverage this organization-wide data standard, and eliminates the need to manage multiple databases. It also offers the following benefits:

- Eliminate the costly process of synchronizing multiple source directories and applications
- Save support agents time by eliminating use of inaccurate or out-of-date data
- Reduce time spent collecting and/or manually searching for customer contact and relationship history data
- Eliminate embarrassing support errors with customers

Information and Data Mapping

Independent of the database used, organizations can extend and expand data stored in SQL-based applications, and dynamically link this information into trouble tickets within the service desk. Information such as account numbers, IT asset information, functional department, and service level agreements stored in applications outside the service desk can be easily and dynamically integrated to pre-populate trouble-tickets. This capability allows agents to automatically capture specific information and accelerate problem resolution.

Dynamic vs. Static Database Links

The key to integrating SQL into the service desk can be summed up with one word: "dynamic." To get the most flexibility and utility from SQL databases, it is critical that your service desk can dynamically link to these external data sources in order to gain instant access to the most updated information in these systems. Other links that require synchronization and manual manipulation provide limited use, as the information that the service desk is leveraging is static and likely outdated.

In today's 24/7 business environment, information is continuously updated at light speed. The need for a dynamic link to the latest, most accurate customer data is critical to maintaining the latest information. If your service desk solution cannot keep up, or if it is not able to pull the most up-to-the-minute data, it is essentially out of step, and any decision (routing, escalations, etc.) may be incorrect – impacting the overall effectiveness of the service desk.

The Right Service Desk Solution

Integrating SQL-based data into the service desk does not require a huge investment in software, programming, and consulting. In fact, there are solutions available that can be up and running in a day without any programming, consulting, or training, and not require a full-time database administrator. When selecting a solution, be sure that it includes the following core components:

Your Choice of SQL Database

Your service desk solution should be compatible with a broad range of databases in order to leverage existing IT resources. When creating and updating your standard trouble-ticket, address book, asset, and other data, you want the service desk solution to support SQL databases currently used by your organization.

Open Architecture

You want the service desk you choose to fully document the database tables it uses, while allowing the use of third-party tools to backup, report, view, and export the data per your specific requirements.

Dynamic SQL Database Link

With a dynamic SQL-based address book link, you have a direct connection to existing SQL-based contact records and information, perhaps in your SAP, PeopleSoft, Oracle or Microsoft SQL databases. The dynamic link will allow your service desk to dynamically lookup customers and pre-populate trouble-tickets with the most accurate, real-time contact information.

Dynamic SQL Field Mapper

This feature allows you to populate trouble-ticket fields within the service desk from virtually any SQL-compliant database for service contract, asset, or other information for users' issues.

Easy to Implement, Customize, and Maintain

Investigate how this dynamic SQL access process will be implemented with the tool you choose. Some service desk solutions will require programming and possible consulting services to get you up and running with your SQL integration. Many service desk solutions offer the flexibility to be customized, but may require programming for this as well. The ideal scenario is to implement, customize, and maintain this dynamic SQL access process without requiring dedicated (and costly) database administrators, programmers, and consultants to implement the system and make ongoing changes. Your service desk should be able to dynamically modify database tables to capture new or different data.

Summary

In today's 24/7, multi-channel service and support environment, an integrated service desk is essential to deliver the levels of service and support customers now expect. You meet and even exceed customers' high expectations by dynamically linking your web-based service desk to existing SQL databases to help your support agents access the right information at the right time from wherever they are to deliver prompt and precise support to customers through their preferred communications channel. This capability will allow you to work with all the existing data resources you have at your disposal, in real-time, and position your service desk agents as informed, empowered, and highly skilled professionals. It also offers measurable benefits to your organization, including reduced service and support costs, increased agent productivity, improved customer satisfaction, and service-level agreement compliance.

In choosing a service desk system, be sure to investigate how easily and quickly it can dynamically access your current SQL databases. Integration between the two should not require custom programming and costly consulting. With this capability, small and large organizations alike can optimize their SQL database investments and extend it to support a range of service desk activities. By doing so, you can deliver exceptional levels of service that keep employees and customers satisfied.

Beyond a more satisfied employee and/or customer base, this functionality also benefits your organization by reducing overall service and support costs and increasing workforce productivity, further ensuring service-level compliance.

About UniPress Software

Headquartered in Edison, New Jersey, UniPress Software, Inc. is a developer of web-based service desk automation software targeting mid-market companies, departments within large enterprise organizations, and small businesses. The company's FootPrints line of service desk and eService solutions, launched in 1996, provides a comprehensive range of capabilities to significantly improve help desk and customer support operations, and is widely used by 2,000 plus corporate organizations, government offices, and educational institutions worldwide, including Prudential Financial, BHP Petroleum, IBM, Kampgrounds of America, UBS Capital Markets, the IRS, and the University of Pennsylvania.

About the FootPrints Product Line

Since its launch in 1996, the FootPrints line of support automation solutions has evolved as a flexible, web-based service desk suite with a low total cost of ownership and fast ROI, and today is used by nearly 2,000 organizations worldwide. The FootPrints product line, which has garnered many industry awards and is frequently recognized by industry analysts, consists of four principal applications, including FootPrints, FootPrints for eService, the FootPrints Hosting Service, and FootPrints for Exchange. The FootPrints Dynamic SQL Database Link enables you to integrate with your existing SQL-based directories, such as Microsoft® SQL Server™, Oracle®, MySQL™, Access, and others. An add-on module with 2 components, the FootPrints Dynamic SQL Database Link enables you to dynamically link to the latest customer contact records in your existing external

relational database. You can dynamically populate issue data fields from any SQL-compliant database for user contact, service contract, asset, and other information for a user's issue. The FootPrints Dynamic LDAP Database Link is an add-on module that enables you to access user contact data stored in Microsoft Active Directory, Lotus Notes®, Domino, Novell® eDirectory, and other LDAP-compliant directories.

The FootPrints product line also includes numerous integrations for extended business value. For the help desk and IT support automation market, capabilities include IT asset management, network security and monitoring, live eSupport, dynamic links to LDAP-based corporate address books, and many more. For the customer support/eService automation market, capabilities include live eSupport, telephony integration, dynamic links to SQL-based corporate databases, and integration with sales automation.

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