

# MICROS Symphony First Edition Large Enterprise System (LES)

## Introduction

Today's market forces are shaping a hospitality marketplace that will look radically different in the years to come. Technical issues that are more complicated than anything previously faced in the industry today are challenging hospitality companies. Industry consolidation has led to larger hospitality companies, with industry



expansion and demand at record levels. Customers have become more demanding than ever; a result of the proliferation of self-service travel web sites offering greater choice and price comparison capabilities. The Internet has shifted the balance of power to the customers, resulting in higher levels of travel but less loyalty toward brands. In response to the changing environment, hospitality companies are in search of flexible, scalable platforms to power their guest-centric environments. There is strong demand for solutions that can easily expand and contract with the business, and integrate across the entire technical portfolio to deliver innovation that result in a sustainable competitive advantage.

The MICROS answer to this growing demand is Symphony First Edition, the next-generation POS solution for the LES market. Symphony First Edition is a perfect fit for a world of fast-changing requirements and evolving technical capabilities. Built using a modern, flexible architecture and a services-oriented design, Symphony First Edition provides superior scalability and integration capabilities, easily surpassing any LES solution available today. Not only will Symphony First Edition meet and exceed current and developing industry demands, the product has the potential to initiate a technological paradigm shift, offering the market a choice between a purchased asset model, to a delivered software service model.

## Architecture

Symphony First Edition is the first enterprise-enabled, service-oriented product offered to the LES market, creating a significant product differentiation that could potentially capture a large market share. Demand will be driven not only by the product's Superior Architecture, but also by its Scalability/Reliability, Integration Capabilities, and Flexible Configuration and Deployment Options.

The Symphony First Edition product architecture is designed using Service-Oriented Architecture (SOA) for a number of reasons. First, SOA is a widely used industry buzzword surrounded by an enormous amount of hype. Few people truly understand SOA, but everyone wants it, creating an instant market and clear differentiation for SOA products. But Symphony First Edition goes beyond marketing hype. It will actually deliver on the SOA promise. The service orientation of the product means it closely reflects the processes and flow of the business, fully supporting diverse deployment and operational requirements that match individual customer needs. This is the key Symphony First Edition advantage, the ability to be deployed in a manner that looks like the business.

Symphony First Edition is a service-based business solution that may be deployed in a manner that best fits the needs of the business. Symphony First Edition users may choose to centrally host an entire enterprise or deploy the complete application to a single location. Individual Symphony First Edition services may be deployed at any level of the Symphony First Edition infrastructure as needed. Services may be configured specific to a Property, Revenue Center, or Workstation, creating a custom level of functionality, resiliency, and performance for each Symphony

First Edition customer. Examples of such services include credit card processing, interfaces, and printing services. The bottom line is Symphony First Edition will meet the needs of the user regardless of the technical deployment requirements or size of the enterprise.

### **Scalability/Reliability**

Another advantage of SOA is its ability to offer almost unlimited scalability and unmatched reliability. Symphony First Edition's design allows the product to be deployed across a number of physical servers in a "scale-out" configuration, as opposed to the "scale-up" characteristics of competitive.

To further complement the scale-out architecture, Symphony First Edition offers multiple levels of resiliency. The Symphony First Edition client is fully resilient, capable of performing mission critical operations in the event of an upstream technical failure. Locally deployed components such as printing and credit card processing services keep a site running at all times without direct data center communication. An optionally deployed labor and transaction data cache can provide consolidated site or revenue center-level reporting without any external communication requirements. The complete set of Symphony First Edition scalability and resiliency features make it the most robust and technology failure tolerant solution available today, far exceeding any competitive solution available today.

### **Integration Capabilities**

The Symphony First Edition architecture proves the ideal integration platform for the global hospitality industry. The product was designed to provide full integration into diverse environments; delivering the complex, mission-critical functionality demands of the most innovative customers. SOA is not a requirement for sophisticated integration, but reduces complexity by utilizing B2B integration standards such as web services.

Symphony First Edition will provide a suite of web services-based Application Integration Services designed to handle discrete business function such as database imports and exports, and order placement from non-MICROS order devices. The primary goal of these services is minimized total cost of ownership through consolidated system management, and to offer new and innovative opportunities to increase sales and guest satisfaction through web/kiosk ordering services, putting guests in charge of their own experience anytime, anywhere. The initial Application Integration Services suite will include an Import/Export Service as well as Transaction Services.

### **Client Level Stand Alone Resiliency**

The Stand Alone Resilient (SAR) client has been specifically developed to provide a viable solution for most checking, cashiering and limited service functions during server or connectivity outages. SAR terminals act as a safeguard to total system failure and provide continue operations during server or network down times.

The SAR client utilizes a client side database that allows the operator to enter orders during network or server availability disruptions. The SAR client also provides network optimization that is designed to reduce the amount of server communication required during a transaction. Combining these two qualities allows the SAR Client to operate in environments where availability of POS operations is critical. The SAR client is a particularly good fit for stadiums and arenas where POS based revenue generation is done in a window of only a few hours and loss of POS functionality is devastating.

## Core Functionality and Foundation

The Symphony First Edition foundation is built upon a database independent architecture with Microsoft SQL Server as the transactional database platform. The Service Oriented Architecture (SOA) splits the individual operational services of Symphony First Edition from the relational database, creating a solution with robust scalability and performance characteristics.

Symphony First Edition can be deployed in a wide range of server configurations from a single server loaded with both the Symphony First Edition application and database, to a centrally hosted configuration consisting of a load balanced server farm located in a hosting center.

Symphony First Edition can be deployed utilizing a centrally located database server with only Stand Alone resilient clients residing on site.

Symphony First Edition is user-friendly on all levels yet provides a robust suite of features and functionality including:

- Relational Database support (Microsoft SQL Server 2005 or 2008 R2)
- Fail-Safe operability provided by the combination of
  - o Stand-Alone Resilient (SAR) clients
  - o Operational Resiliency through the SOA
- TCP/IP Ethernet Based Communication between server and clients
- TCP/IP Ethernet Based Printing
- VISA/CISP/PCI Compliant
- Robust and Flexible programming options including:
  - o Multiple Tax Levels
  - o Full Featured Discount (coupon) Functionality
    - Item or Sub-Total Discounts
    - Employee Meals
    - Restrict usage based on menu item and dollar value
- Employee based access level control and security
- Ability to run tabs
- Event based reporting
- Robust Printing (and Display) Options
  - o Remote Order Printing to one or all of your programmed printers from any workstation
  - o Remote Order Display Requisition to one or all of your programmed Kitchen Display Systems from any workstation
  - o Flexible Remote Order Printing based on menu item programming
  - o Receipt printing to a single printer from one or all of your programmed workstations
- Robust reporting capability from the server, workstation or Symphony First Edition Reports installed on any networked PC



- Fully scalable design and architecture that allows expansion of applications and interfaces without significant hardware replacement

- 100% Microsoft Windows™ based server and client side applications

- Rugged and Reliable POS Client hardware options including the Keyboard Workstation 270 and the Workstation 5a. Both are designed specifically to be able to be deployed in an outdoor environment where exposure to the elements, spillage, and high volume use are common-place.

The Symphony First Edition POS System provides the ability to interface directly with other MICROS products and a large selection of 3rd party products and solutions giving Symphony First Edition a strategic and valued placement in your IT infrastructure.

## **POS Functionality**

Symphony First Edition POS will provide advanced POS functionality in the Food & Beverage and Merchandising areas as needed utilizing the MICROS Workstation 5a (Ws5a), MICROS' touch-screen style workstation and MICROS Keyboard Workstation 270 (KW270), MICROS' flat-panel keyboard style terminal. MICROS Symphony First Edition is the foundation for the large enterprise environment, designed to integrate all functions of food and beverage operations into a single, highly-scalable, dependable solution.

MICROS Symphony First Edition utilizes the industry's most advanced technologies to deliver maximum flexibility and scalability. The system has been built as a native Microsoft® Windows® application utilizing the latest development tools with Relational Database support (Microsoft SQL Server) to leverage the expanded power, resiliency, and built-in security of this world-proven operating system.

The Symphony First Edition product suite is positioned for the large enterprise market that is typically associated with very high transaction volumes, many workstations, many revenue centers and the need for reliable and consistent system availability. The Symphony First Edition product suite's features are focused on large venue customers such Stadiums, Arenas, Theme Parks and Zoos, as well as Airports, Hotels, Ships and other large volume environments.

## **Enterprise Management Console**

The Symphony First Edition Enterprise Management Console (EMC) is the next generation configuration tool for Large Enterprise POS Configurations. This application offers two significant benefits.

EMC is web-delivered. This means EMC users access the application using a URL from their desktops over a network, or even the Internet (provided user is connected through VPN to the site). Web-delivered applications offer immediate cost savings to an organization, eliminating manual software installation and much of the ongoing management required of Client/Server applications.

The enhanced functionality provided with EMC also includes:

- Easy Report Printing Configuration
- Ability to Email Standard Reports
- Enhanced Device Management

## **Reporting**

The Symphony First Edition includes the Symphony Reports Engine. This dynamic reporting engine provides the ability to view reports in a static fashion or dynamically on the screen of a computer terminal. The dynamic version of the reports allows the user to "drill down" into the reports to determine specific information. The reports can also be viewed graphically. The graphical view is helpful in determining trends or exceptions to normal business. Reporting date ranges are not confined to the "fixed period" views available for existing reporting. Reports can be generated for a single day, a range of dates, or a collection of noncontiguous dates.

## Simphony First Edition Reports:

Standard reports found within Simphony First Edition reports application include:

- Daily Operations
- Day Part Operations
- Revenue Center Operations
- Today's Operations: Today's operations as of the latest transaction posted
- Today's Tenders: Today's payments, loans and pickups by tender type

## Detailed reports for daily totals:

- Adjustments: error corrects, voids, returns and cancels
- Control Reports: revenues, adjustments and change in gross
- Cost of Goods: cost of goods sold by major or family group
- Discounts/Promos: item and check discounts
- Job Codes: Regular, overtime, hours and pay by job code
- Sales Mix: Sales mix by major and family groups
- Service Charges: Gratuities and Tips
- Taxes: Tax Details
- Tenders: Payments, loans and pickups
- Sales Mix: sales mix by major group and family group
- Service Charges: fees, gratuities and tips
- Service Performance: guest counts, checks, averages
- Taxes, with tax details
- Tenders: payments, loans and pickups
- Employee Sales Detail: Summarized employee sales performance

## Comparison Reports:

- KPI's by Date: Key performance indicator for each date
- Time Comparison: Shows 2 time periods in side-by-side comparison

## Menu Engineering:

- Menu Engineering: Individual item revenues and contribution margin
- Pricing Averages: Average prices for groups of revenue centers

Users can make a connection to the local Simphony First Edition Reporting Database using a web browser and run any of the reports listed above. The output generated from a specific report can be exported in Adobe® Acrobat® (.pdf), Comma Separated Value (.csv), or Microsoft® Excel (.xls) format, or can simply be viewed within the web browser interface. The Simphony First Edition reports interface defaults to the current business day, but an easy to use calendar includes a revenue center selection criterion, allowing a user to define a report for any combination of revenue centers, from a single outlet to the entire site.

## Report Mail Utility:

- Allows the ability to automatically email predetermined reports to anyone at any time of the day

## **NOTE to EXISTING MICROS 9700 Users:**

**\*It is highly recommended that all Operational Users of an existing MICROS 9700 system carefully review the Reporting differences between Simphony First Edition v1.6 and their currently installed 9700 system, in detail.**

## Simphony First Edition Audit and Analysis Utility

Simphony First Edition Audit and Analysis Utility allows the user to query the reporting database using three types of searches:

- Transaction Detail Search
- Transaction Summary Search
- Non-Check Transaction
- Authorization Search.

Each of these searches can be saved as a stored query, available for repeated use.

### **Transaction Detail Search**

Transaction Detail Searches offer a richer set of search criteria. They perform complex transaction searches, and deliver business intelligence for decision making and loss prevention. For example, Detail Searches allow a user to find all checks that contain a specific set of menu items, a discount or combination of discounts, a void, manager authorization, or tax exemption. Each Detail Search produces a summary of matching results, and provides links to the check image and journal file entry for the transaction. Journal files extend the functionality of Detail Searches.

Transactions that match the search criteria can be examined in the journal, which includes complete transaction detail, such as the name/employee number of any employee who performed an authorization during the transaction, and any void reasons that were entered during the removal of an item from the check. The result of any search can be saved in a variety of formats, including text, HTML and CSV.

### **Transaction Summary Search**

A Transaction Summary Search locates an individual transaction based on criteria such as Revenue Center, Employee, Start/End Time, Check Number, Table Number, and Check ID. This transaction could have occurred within the last few minutes, or within the last few years, depending on the amount of data warehoused in the reporting database. There is no software imposed limit on the amount of data stored—the size of the data warehouse is limited only by the amount of hard disk storage available.

### **Non-Check Transactions and Authorization Security Searches**

Security Searches allow users to search for transactions that contain an authorization. The user can search for any of the more than 80 types of authorizations that are found in the Employee Class file. This includes items such as check editing, transfers, voids, discounts, service charges, returned items, and re-opened or adjusted checks. Each search returns the check number, transaction time, transaction and authorizing employee, and authorization type. Security Searches make it easier than ever to track the use, and uncover the abuse of security related activities in the Micros Simphony First Edition.

### **Stored Queries**

Any of the Simphony First Edition Reports searches can be saved for future use. A query is initially saved as a Personal Query, accessible only to the user who defines it. This user has the option of sharing the query, making it accessible to any Simphony First Edition user. The application can also be integrated into the Simphony First Edition Autosequencer, allowing any Public Query to be executed during the daily End-of-Day Autosequencer.

### **TCP/IP Based Credit Card Functionality**

This application allows high-speed authorization and settlement traffic to travel over a private network, or the Internet, to Merchant Link, LLC (MLI). In order to ensure the best level of availability, the driver provides dial backup capability, in the event of a network interruption.

### **Discount and Coupon Functionality**

The MICROS Simphony First Edition provides discount and coupon functionality through its “discount” file. The system provides the ability to program discounts as item or sub-total discounts. Each discount can be configured to be available on as many as 16 discount itemizers thereby providing the ability to dictate what menu items and amounts are required on a guest check before a specific discount can be applied. Discounts can be programmed to

require an alpha-numeric reference entry when applied that can be used to store information such as a Coupon ID or reference number, promotion name, or other relative information.

## Stand Alone Resiliency

The Symphony First Edition Stand Alone Resilient (SAR) client has been specifically developed to provide a viable solution for all service functions during server or connectivity outages. The Symphony First Edition SAR terminals act as a safeguard to total system failure and provide continued operations during server or network down times.

## Operating System

**It is recommended that all new deployments use Microsoft® Windows® Server 2008 R2.** The following chart shows which Microsoft® operating systems are supported for the enterprise application and database servers:

	Microsoft® Windows Server 2008 R2	Server 2008	Server 2003 R2
Application Server	X	32 and 64 bit	32 and 64 bit
Database Server	X	32 and 64 bit	32 and 64 bit

## Database Support

**It is recommended that all new deployments use Microsoft® SQL Server 2008 R2.** The following databases are supported for the enterprise databases:

	Supported
Microsoft SQL Server 2008 R2	X
Microsoft SQL Server 2005	X

## Client Application License (CAL)

**1-Microsoft Windows 2008 Client Application License (CAL), and 1-Microsoft SQL Server Workgroup Runtime CAL,** are required for EACH:

- Symphony First Edition POS client
- Symphony First Edition KDS Client
- Symphony First Edition Concurrent EMC and/or Reports user at the desktop level

### **Note to EXISTING MICROS 9700 Users**

- Every existing Micros 9700 POS/KDS client license should already have **1-Microsoft Windows 2003 Client Application License (CAL).**
- Every Micros 9700 POS/KDS client license purchased from DCRS included **1-SQL Server Workgroup Runtime CAL (DCRS sold only the version that had SQL built-in to Micros 9700 license).** Users purchasing directly from Micros may have purchased the version that did not include SQL in the Client license.
- If copies of original DCRS invoices are maintained, those existing Micros 9700 customers may not have to re-license these for Symphony First Edition POS or KDS clients.
- However, proof of Win CALs and SQL license for Simphony First Edition Concurrent EMC and/or Reports user at the desktop level is the responsibility of the End User (DCRS sold all users a specific amount of SQL seat licenses for 9700)

## **Signature Capture Support (Optional)**

The Mobile MICROS application has been updated to support taking signature captures on the terminal. The check image, including the signature, can be accessed from the Audit & Analysis tool in the Symphony First Edition Reports module.

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