

# Sentinel LDK-EMS 10.0

INTEGRATING SENTINEL LDK-EMS SERVER INTO YOUR  
EXISTING BACK-OFFICE SYSTEMS



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# Contents

<b>Introduction</b> .....	<b>4</b>
Benefits of Integration .....	4
Enhancing Your Existing Systems .....	4
Sentinel LDK—Protecting and Licensing Your Software .....	5
Protect Once—Deliver Many .....	5
Sentinel LDK-EMS Server .....	5
License and Product Information .....	6
Order Processing and Production .....	6
Products for Trial or Grace Period Use .....	6
Software Activation and Online Updates .....	6
Sentinel License Generation API .....	6
Designing the Integration to Suit Your Requirements .....	7
<b>Adding Value to Your Business Intelligence Systems</b> .....	<b>9</b>
Marketing and Product Management Data .....	9
Sales-related Information .....	9
<b>Adding Value to Your ERP and Order Processing Systems</b> .....	<b>11</b>
Order-related Functions and Data .....	11
Operational Functions and Data .....	11
<b>Adding Value to Your CRM and Customer Support Systems</b> .....	<b>13</b>
Customer-related Functions and Data .....	13
Automated Secure Online Activation .....	13
<b>Auditing Your Systems</b> .....	<b>15</b>
<b>Planning and Implementing the Integration</b> .....	<b>16</b>

# Introduction

This guide outlines the many ways that you can maximize the potential of your existing back-office systems, such as ERP, CRM, and business intelligence systems, through seamless integration with Sentinel LDK-EMS Server.

## Benefits of Integration

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Integration with Sentinel LDK-EMS Server can help improve the efficiency and security of your organization's systems in a number of ways, for example:

- > **Single point of access:** Personnel in all departments can access and use Sentinel License Development Kit data and functionality using their familiar interface on their existing workstation, without the need for multiple consoles.
- > **Automation of processes:** Day-to-day activities such as license activation can be automated, thus reducing the use of valuable human resources and passing on the benefit of better response times to your end-users.
- > **Preventing information loss:** Integrating Sentinel LDK-EMS Server into existing systems and their databases keeps all relevant information together, and assures that it is less likely to “fall through the cracks.”

## Enhancing Your Existing Systems

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Sentinel License Development Kit (Sentinel LDK) is a Software Digital Rights Management (DRM) solution that delivers strong copy protection, protection for Intellectual Property, and secure and flexible licensing.

Integration with Sentinel LDK-EMS Server offers all your departments transparent access to valuable information and functions relating to your customers, products, orders, and sales.

Your personnel can continue to work with the same consoles employed for your current systems, using the systems and interfaces familiar to them, while taking full advantage of the extensive data and functionality that Sentinel LDK-EMS Server provides.

The integration can further enhance efficiency by acting as a unifying element for the many systems and tools used in your organization.

Systems that might benefit by integration with Sentinel LDK-EMS Server include:

- > CRM systems
- > ERP systems
- > Order processing and fulfillment systems
- > Business intelligence systems

- > Sales and marketing analysis systems
- > Other DRM systems

## Sentinel LDK—Protecting and Licensing Your Software

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Sentinel LDK is an all-in-one solution that enables you to choose a hardware- or software-based protection key, based on business considerations. Sentinel LDK software engineering and business processes are completely separate to ensure:

- > Effective and efficient product development
- > Quick time to market
- > Immediate addressing of customer and market needs
- > Comprehensive support throughout the software product's protection and licensing life cycle

For more detailed information on Sentinel LDK, refer to the Sentinel LDK Software Protection and Licensing Guide.

### Protect Once—Deliver Many

At the heart of Sentinel LDK lies the Protect Once—Deliver Many concept. Protect Once—Deliver Many is the process of protecting your software completely independently of the process of defining sales and licensing models.

The engineering process—that is, the protection of your software—is performed by your software engineers using Sentinel Envelope, Sentinel ToolBox and the Sentinel Licensing API protection tools.

The business processes—that is, software licensing and selection of the appropriate Sentinel protection key—are performed by business management using Sentinel LDK-EMS.

## Sentinel LDK-EMS Server

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The day-to-day ordering and production processes related to the sales of your licensed products, as well as customer support functions, are performed using Sentinel LDK-EMS.

The Sentinel LDK-EMS application provides a user interface to the Sentinel LDK-EMS Server, which enables all the necessary functions for the smooth operation of the ordering and production processes.

Sentinel LDK-EMS Server also maintains a database containing a wide range of information, including data related to product licenses, sales, orders, and customers.

After integration with Sentinel LDK-EMS Server, users of your back-office systems do not need to use the Sentinel LDK-EMS application—they can benefit from direct access to all the important Sentinel LDK-EMS functions and data from their existing application interfaces.

## License and Product Information

Your organization's licensing plan includes the Products that your company wants to sell and/or distribute for evaluation, and the individual functional components that can be independently controlled by a license, referred to as Features.

The details of all defined Features and Products are stored in the Sentinel LDK-EMS Server database, and are available to any integrated system.

## Order Processing and Production

Staff in your organization's orders department receive and fulfil orders for Products or license updates. Products are supplied with one or more Sentinel protection keys.

License updates specify changes to be made to the license terms stored in Sentinel protection keys that have already been deployed.

The Sentinel LDK-EMS Server database maintains details of all orders, together with information about the associated customers, and the license terms and memory data stored in their Sentinel protection keys. This comprehensive information is available to any system integrated with Sentinel LDK-EMS Server.

After integration with Sentinel LDK-EMS Server, your order processing personnel can use their existing systems to define, modify and produce orders, access production information, and to store or update data in the memory of users' Sentinel protection keys.

## Products for Trial or Grace Period Use

In Sentinel LDK, Products that are intended for distribution as trialware or for use during a grace period are referred to as Provisional Products.

The Sentinel LDK-EMS Server database maintains details of all distributed Provisional Products, including those subsequently converted to fully licensed Products, and those approaching the end of their trial period. This data is accessible through any integrated system.

## Software Activation and Online Updates

Product activation and online license updates are performed by means of the Sentinel LDK-EMS Server when your software is at the end user's site. These functions are available to any system that has been integrated with Sentinel LDK-EMS Server.

The Sentinel LDK-EMS Server database maintains details of all Product activations and license updates.

## Sentinel License Generation API

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For sites that already have a licensing infrastructure in place or that prefer to implement an alternative to Sentinel LDK-EMS and Sentinel LDK-EMS Server, Sentinel LDK offers a standalone licensing solution.

You can use Sentinel License Generation API together with your existing licensing server software and ERP and CRM back office systems for maximum flexibility and control over your business processes.

Sentinel License Generation API provides the functionality required to generate and maintain Sentinel protection keys, but without any of the back office services that are provided by Sentinel LDK-EMS. All the required services are provided by the system that you choose to implement. You would use Sentinel LDK only to handle the protection and licensing functions for your applications.

The implementation of Sentinel License Generation API is beyond the scope of this book. The remainder of the book relates to integration of Sentinel LDK-EMS into your back office systems.

## Designing the Integration to Suit Your Requirements

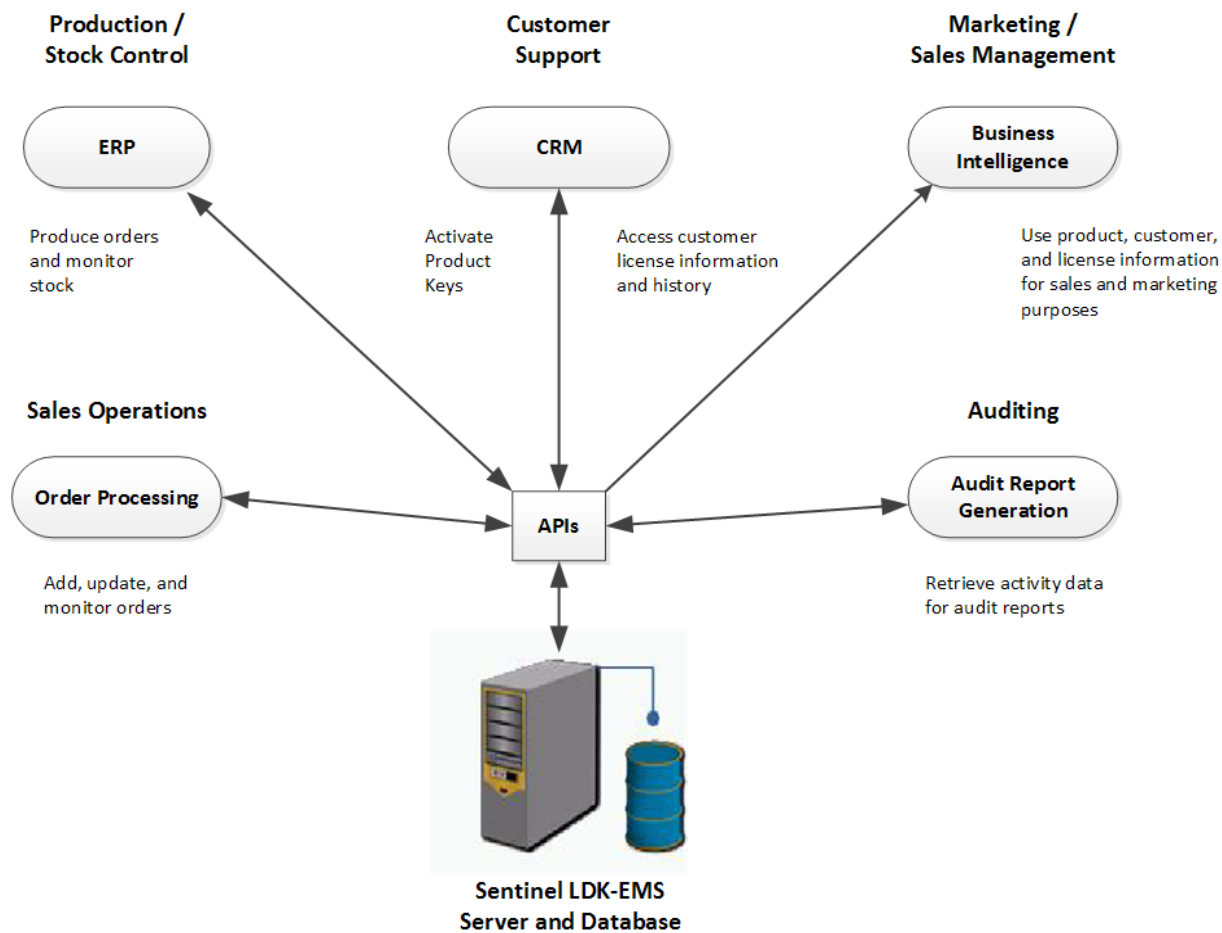
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Integration with Sentinel LDK-EMS Server is based on API connections, and can be implemented in a SOAP Web Services environment if required, enabling maximum flexibility and versatility.

You can choose from a range of Sentinel LDK integration options, enabling your organization to design and implement the integration model most suited to your specific requirements.

Each organization selects the type of functions and data required, determines which systems are to be integrated, and generates its own individual design for the integration.

The diagram on the following page outlines some of the possible integration options.





# Adding Value to Your Business Intelligence Systems

Integration with Sentinel LDK-EMS Server enables instant access to the huge repository of information relating to sales of your licensed and trial products, including customer preferences, conversion of trialware, license usage and capacity, and so on.

This data can be used in conjunction with your existing sales and marketing analysis tools to provide up-to-date sales and marketing statistics that you need at your fingertips.

## Marketing and Product Management Data

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Product Management and Marketing personnel can use the information retrieved from the Sentinel LDK-EMS Server to analyze, for example, which Products, Features, and license types are selling well and in which market, to monitor conversion trends for trialware, and much more.

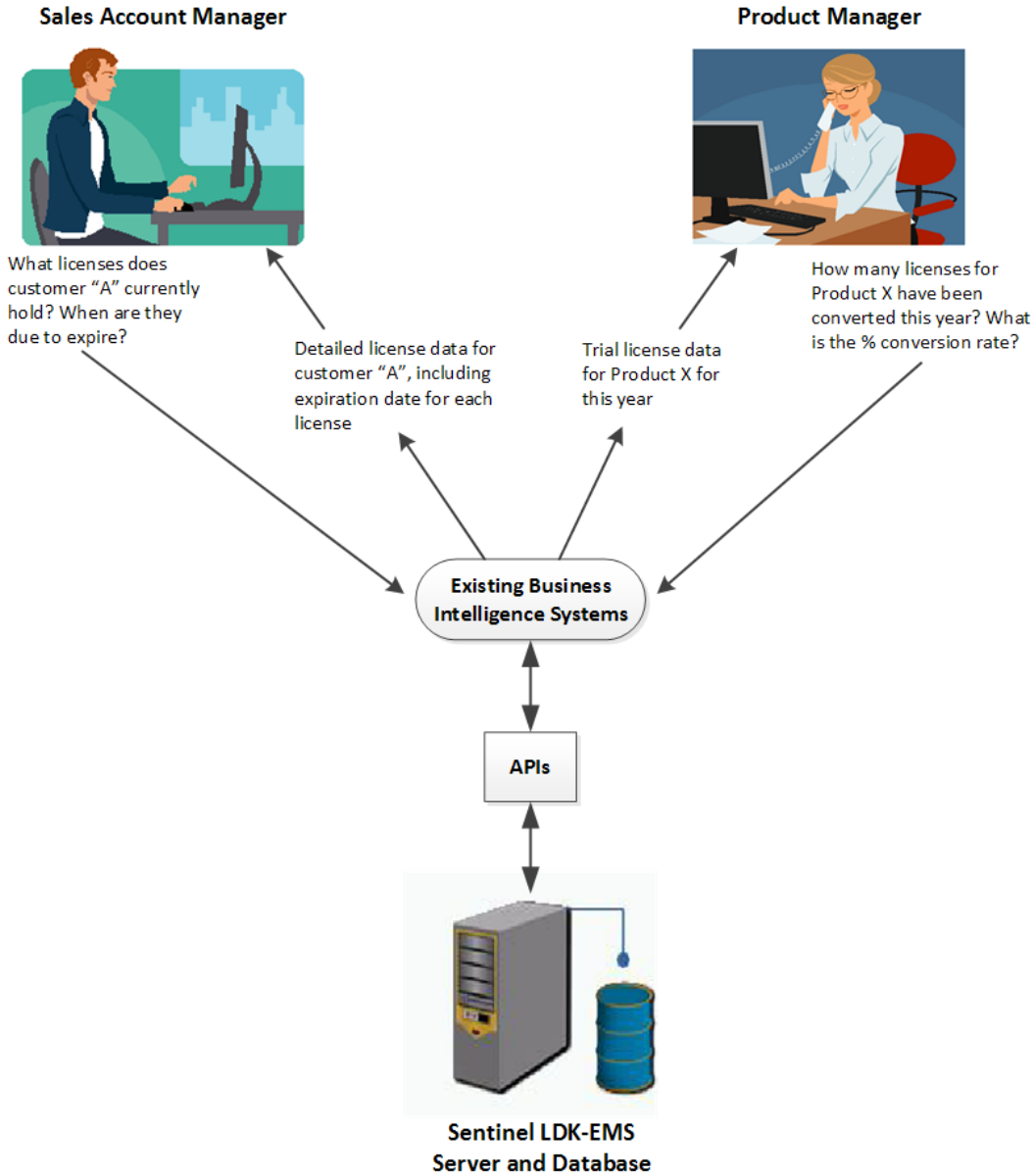
## Sales-related Information

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The following are just some examples of the sales-related data that can be retrieved using the Sentinel LDK-EMS Server integration:

- > Activations by customer
- > Entitlements by Product
- > Licenses due to expire within a given period
- > Most popular Products ordered

The following diagram illustrates sample scenarios using the integration with Sentinel LDK-EMS Server for sales and product management purposes.



# Adding Value to Your ERP and Order Processing Systems

Integrating your ERP and order processing systems with Sentinel LDK-EMS Server enables your staff to process, produce, and monitor orders for your licensed software using their existing systems, while benefiting from the comprehensive functionality provided by Sentinel LDK-EMS.

## Order-related Functions and Data

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After integration, order processing staff can:

- > Search for customer details
- > Enter new orders
- > Define license terms for orders
- > Modify existing orders
- > Submit orders for production

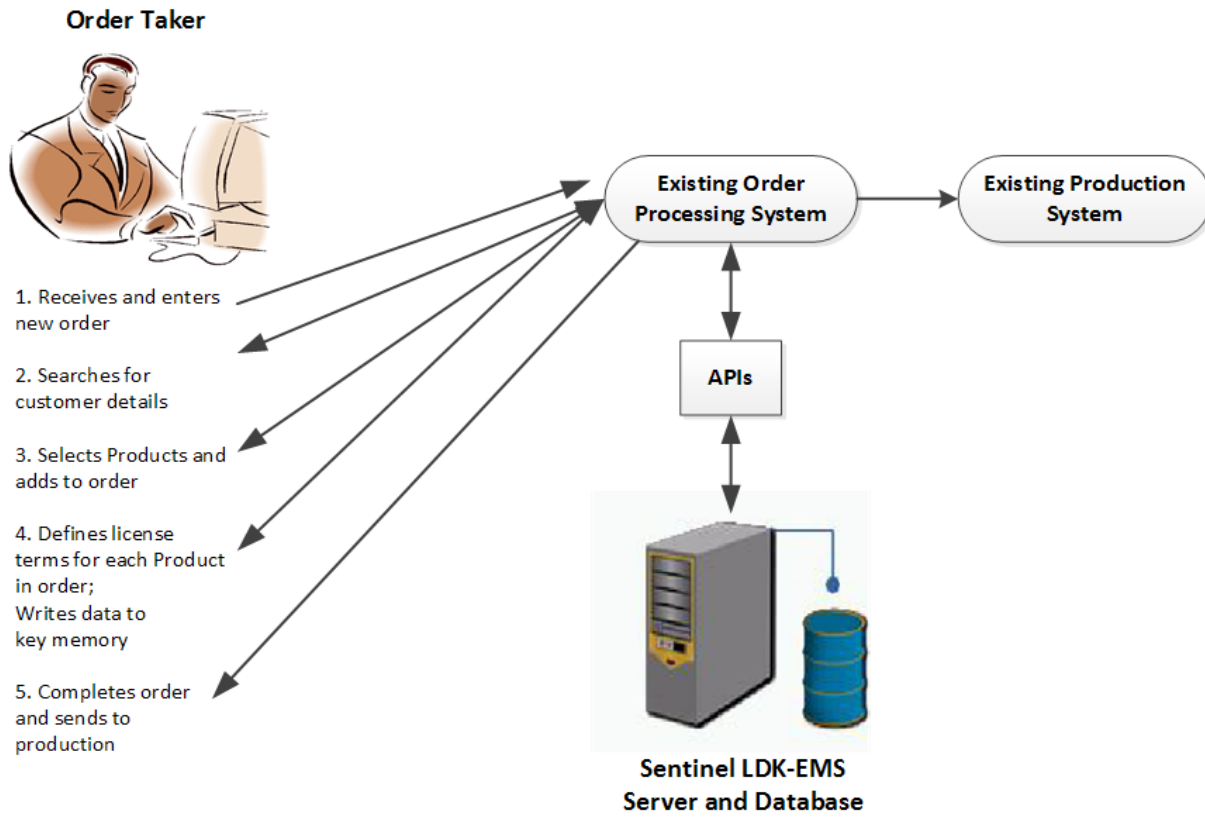
## Operational Functions and Data

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Production staff using integrated systems can:

- > Produce orders for licensed Products, Sentinel protection keys and license updates
- > Monitor order fulfilment
- > Monitor the number and type of keys supplied
- > Access detailed order information, as above

The diagram on the following page illustrates a sample scenario using an order processing system integrated with Sentinel LDK-EMS Server.



# Adding Value to Your CRM and Customer Support Systems

After integrating your CRM and customer support systems with Sentinel LDK-EMS Server, your staff will be able to use their familiar systems to access a wide range of customer information, and to perform online license activation for customers.

Customer support management will benefit from the information made available through the integration with the Sentinel LDK-EMS Server database.

Processes such as license activation can be fully automated using the integration with Sentinel LDK-EMS Server.

## Customer-related Functions and Data

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Using integrated systems, customer support personnel can:

- > Activate licenses for customers, using a Customer-to-Vendor (C2V) file submitted by the customer
- > Locate customers in a variety of ways – for example, by name, CRM ID, Reference ID
- > Access customer license information, including current license details, license history and activation history
- > Access details of individual Sentinel protection keys and Product Keys

## Automated Secure Online Activation

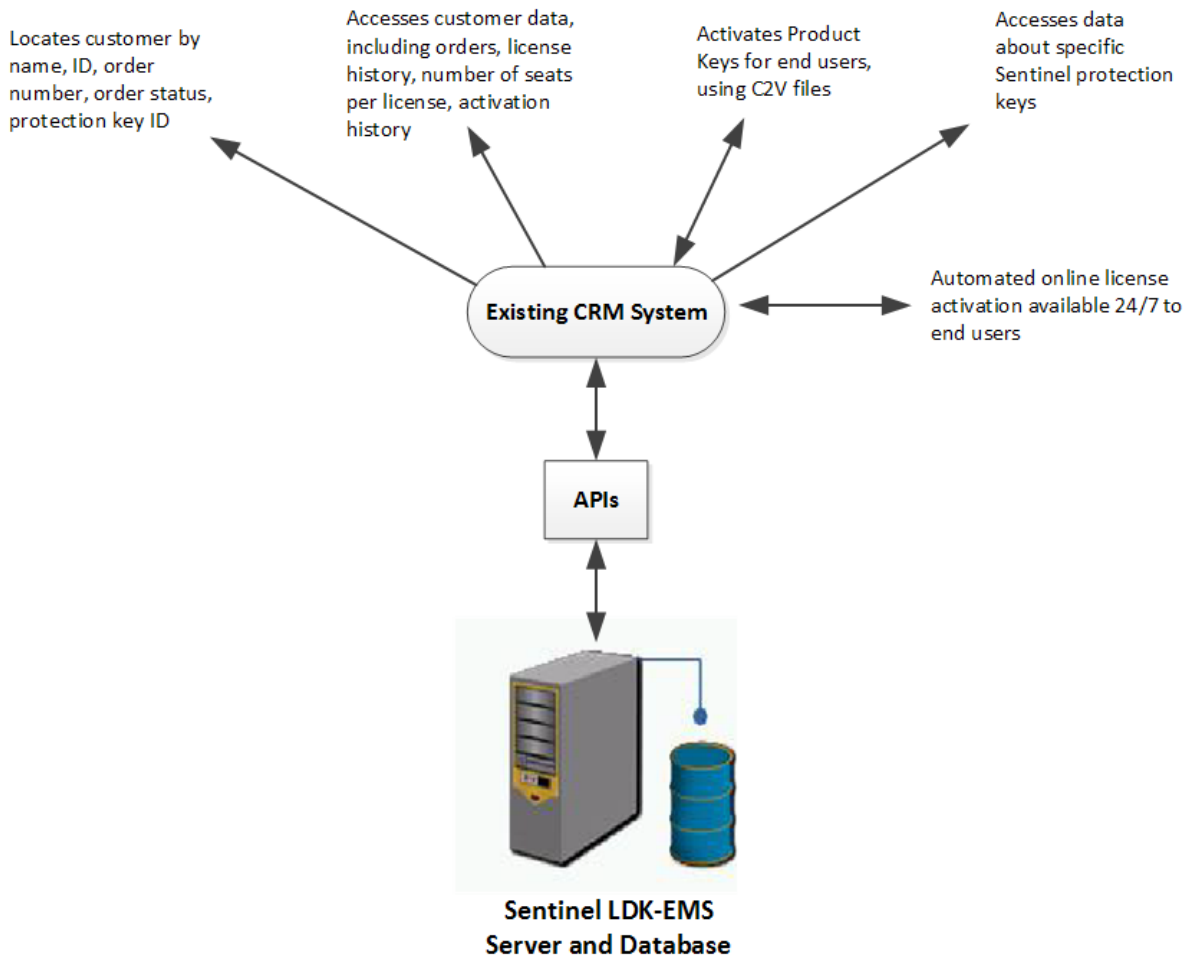
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The integration can enable online activities such as license activation to be automated, resulting in a significant saving in the use of human resources. Your end users would also benefit from better response times from the automated service that could be available 24/7.

The section of the Sentinel LDK-EMS Server that controls license activation may be installed separately from the rest of the Server. In this way, end-users can be given restricted access for the purpose of license activation only, without having access to the entire Server, which can be well within the organization's network, behind the firewall.

The diagram on the following page provides examples of the ways that CRM systems can be used when integrated with Sentinel LDK-EMS Server.

**Customer Support  
Person**



# Auditing Your Systems

The combination of Sentinel APIs and the Sentinel LDK-EMS Server database offers you a comprehensive range of reporting options, enabling you to produce detailed activity and historical reports to suit your specific auditing requirements.

The integration enables your organization to comply with standard regulatory requirements for transparency of reporting.

# Planning and Implementing the Integration

The integration with Sentinel LDK-EMS Server is offered as a flexible, modular process—you decide how many, or how few, of your existing back-office systems to integrate, and in what stages.

The result of this process is a high-level design developed specifically for your organization. Based on this design, you can decide how to implement the integration, and with whom.

The Thales Professional Services unit will be pleased to work with you to find the optimal solution for your enterprise.