

# **Contacts Central<sup>®</sup>**

## **Architecture Design Document**

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## Revision history:

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Revision 6	April 18, 2006	Modified by: Mehdi Abdollahi Updated Client computer requirements.

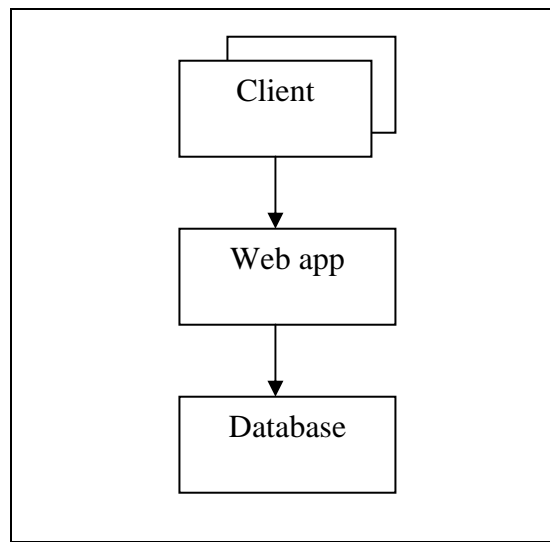
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## 1.0 Introduction

The document is the Architecture Design is for Contacts Central®, a web-based customized Customer Relationship Management (CRM) tool. Contacts Central® is being manufactured by eRational Solutions Inc., with a release date set for April 10, 2006. For more information on Contacts Central® please refer to the Requirements Specification.

This Architecture Design is used to describe the overall architecture and the placement of software and hardware that will be used. This design is self-descriptive enough that low level designers and programmers can completely implement the project in a consistent manner referring only to this document and the Requirements Specification.



**Figure 1 – System Layers**

## 2.0 Operational Requirements

Operational requirements specify the operating environment in which the system must perform and how those may change over time.

### 2.1 *Technical Environment Requirements*

The system will work over the Web environment with any web browser, preferably Internet Explorer. Customers will only need a web browser, preferably Internet Explorer, and an Internet connection, preferably high speed connection.

## **2.2    *Portability Requirements***

The system will need to remain current with evolving Web standards especially those pertaining to ASP.NET

# **3.0    Performance Requirements**

## **3.1    *Speed Requirements***

Response times must be less than 5 seconds. The database must be updated in real time.

## **3.2    *Capacity Requirements***

For version 1.0, it is estimated that there will be at most 150 concurrent users at peak use times.

## **3.3    *Availability Requirements***

The system should be available 24×7. The system shall have 99% uptime performance.

# **4.0    Security Requirements**

## **4.1    *Encryption and Authentication Requirements***

Passwords for User Accounts shall be encrypted before they are saved in the database. If any financial information is taken from customers, it is expected that those information are encrypted as well.

## 5.0 Physical Entity Relationship Diagram

Figure 2 shows the physical implementation of the entity relationship diagram for Contacts Central. The solution presented to solve the many-many relationship between Contact table and Category table is a third link table called Contact\_Category\_Link.

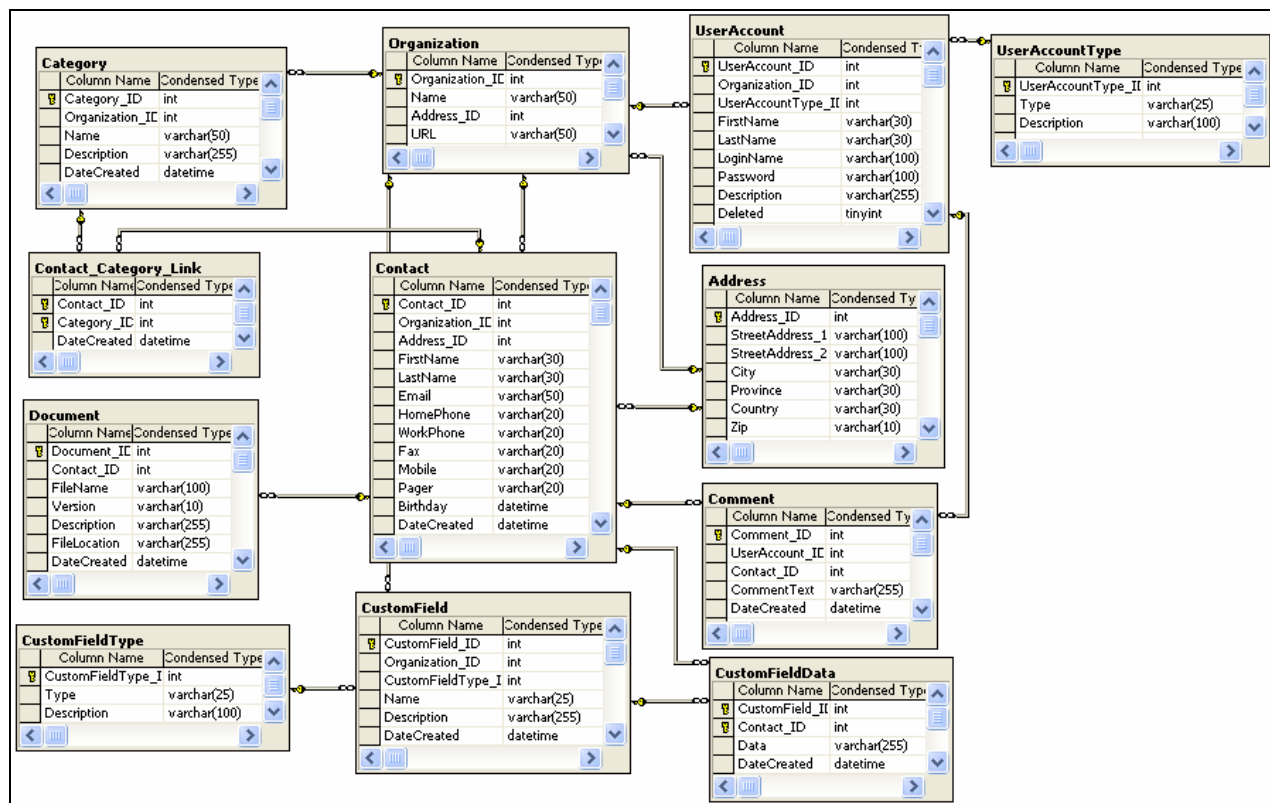


Figure 2 - Physical Entity Relationship Diagram

## 6.0 Hardware and Software Specification

### 6.1 Web Server

- Pentium 4 2.0 GHz
- 512 MB RAM
- Minimum 10 GB of free hard disk space
- 10/100/1000 MBit Network card

- High-speed Internet access with an at least one static IP address
- 3 ½" Floppy disk drive
- CD-ROM
- It is required to have Microsoft .NET® 1.1 platform to be installed on the web server

## 6.2 *Database Server*

- Pentium 4 2.0GHz
- 1 GB RAM
- Minimum 30 GB disk space
- The server must have SCSI disk drives in a RAID configuration
- 10/100/1000 MBit Network card
- High-speed Internet access with an at least one static IP address
- Backup system(tape or optical)
- 3 ½" Floppy disk drive
- CD-ROM

## 6.3 *Client*

- Internet Explorer 5.5 and above are fully supported. Other browsers may run into some problems.

## 6.4 *Operating System*

The web server and the database server are required to run one of the following:

- Microsoft Windows® 2003 Server
- Microsoft Windows® 2000 Server
- Windows 2000 Advanced Server
- Microsoft Windows NT® Server version 4.0 Service Pack 5 (SP5) or later,
- Windows NT Server 4.0 Enterprise Edition with SP5 or later

## 6.5 *Database*

Microsoft SQL Server 2000® Standard Edition.