Working with Odoo

Odoo is one of the forerunners of open source ERP installations. Now with Odoo 8, you have access to a powerful website builder, integrated e-commerce features, and a fast-growing community to help transform and modernize your business.

With this practical guide, you will cover the essential modules to get Odoo up and running for your company. After installing Odoo, you will use its sales management application to enter quotes, create sales orders, and invoice customers. You will then learn how to integrate the CRM application to manage your leads and convert them into lucrative opportunities and sales. Next, you will set up your own purchase management system, assigning products to suppliers and tracking orders with the new warehouse management and routing system. Finally, you will learn how to use analytics to track project expenses and keep your accounts simple and easy to maintain and build an Odoo module to extend its functionality and make it work for you. This book covers all the core functionalities of this popular tool, helping you to fully implement a working ERP system through practical and real-world examples.

Who this book is written for

This book is perfect for people who have never used Odoo and for those who would like to learn more advanced concepts of Odoo. In order to get the most out of this book, you should be comfortable with understanding basic business concepts such as sales, purchasing, inventory management, and basic accounting.

What you will learn from this book

- Configure a functioning Customer Relationship Management system
- Set up a purchasing and receiving system for your company that allows you to track inventory, costs, and profit
- Implement manufacturing operations and processes using real-world examples that you can put to use in your own company
- Discover the capabilities of Odoo's financial accounting and reporting features
- Integrate powerful human resource applications that simplify the collection and management of employee information
- Utilize Odoo's full featured project management application to organize tasks and track times and costs associated with billable projects
- Customize Odoo without writing a line of code

Learn how to use Odoo, a resourceful, open source business application platform designed to transform and modernize your business.
In this package, you will find:

- The author biography
- A preview chapter from the book, Chapter 1 'Setting Up Odoo'
- A synopsis of the book’s content
- More information on Working with Odoo
About the Author

Greg Moss has been a business and information systems consultant for over 25 years. Starting in 1988, Greg began to work extensively on financial and accounting-related applications. He wrote his first custom billing system for a rehabilitation facility at the age of 20. He has worked extensively in the healthcare, point of sale, manufacturing, telecommunications, and service sectors.

Greg is a Certified Information Systems Auditor (CISA) and a Certified Six Sigma Black Belt and was the chief information officer for Crownline Boats, Inc. In addition to studying music and computer science at Southern Illinois University, he completed a BS in business administration and information systems at Walden University. Greg also has an information assurance certification from Carnegie Mellon University.

In addition to Odoo, he has experience in a variety of ERP systems and was a Sage Pro partner for several years. Greg is the CEO of First Class Ventures, LLC and the owner of FirstClassComputerConsulting.com (http://firstclasscomputerconsulting.com/) and OdooClass.com (http://www.odooclass.com/). He is also an Odoo Ready Partner.

In 2014, Greg started a game studio called FirstClassGameStudios.com (http://firstclassgamestudios.com/) and designed and developed NeuroMage, a game that utilizes an inexpensive research-grade EEG headset to allow you to learn spells in the game using only your mind. NeuroMage was first demonstrated at the Neurogaming conference in 2014. As a result, Greg has become a recognized leader in Neurogaming and is humbled to be on an expert panel at the Neurogaming conference in 2015.

Greg is an experienced stock and options trader and has recently started dabbling in currency trading. In his spare time, he enjoys playing trumpet and saxophone with local bands and taking cross-country road trips with his African grey parrot, Bibi.
Preface

Working with Odoo provides a comprehensive walk-through for installing, configuring, and implementing Odoo in real-world business environments. This book will help you to understand the value of Enterprise Resource Planning (ERP) systems and the best practices and approaches for getting a system up and running in your organization. For those who are new to ERP systems, this book will serve as an introduction so that you will be better prepared to understand more advanced ERP concepts. If you are already experienced in ERP systems, this book will give you an overview of the primary applications for Odoo and how those applications can be used in a real business environment.

Odoo is a very feature-filled business application framework with literally hundreds of applications and modules available. Silkworm, Inc. is a highly respected custom apparel, promotional products, and graphic design company in the Midwest, United States. Silkworm has been serving its customers, team members, and community for more than 30 years. Silkworm has been kind enough to allow us to include some basic aspects of their business processes as a set of real-world examples on implementing Odoo into a manufacturing operation. While the examples in this book are extremely simplified, using real-life examples will assist in understanding how to utilize Odoo to solve real-world business problems.

Although Silkworm is actively implementing Odoo, Silkworm, Inc. does not directly endorse or recommend Odoo for any specific business solution. Every company must carry out their own research to determine if Odoo is a good fit for their operation.

We have done our best in this book to cover the most essential features of the Odoo applications that you are most likely to use in your business. Unfortunately, there are just not enough pages to cover more advanced topics. In Appendix, Locating Additional Odoo Resources, we have included additional resources that you can look to for more advanced subjects.
After the book is released, be sure to check for online updates in which we can cover more advanced subjects.

Also, Packt Publishing offers other Odoo books that cover more advanced Odoo topics.

**What this book covers**

The book is divided into three sections:

- The installation of Odoo and the basics of implementing Odoo in your business (chapters 1 through 5)
- An introduction to accounting and finance setup and modules to help your business run more efficiently (chapters 6 through 8)
- Advanced configuration and customization of Odoo (chapters 9 through 13)

Now, let's discuss in some detail what each chapter will cover:

*Chapter 1, Setting Up Odoo*, gets you started right away by showing you how to use Odoo online without any setup. Just open your browser and you are ready to get going. Next, the chapter goes on to cover the different installation types and prerequisites for both Windows and Ubuntu. Instructions are provided to find the right download package and set up Odoo on your own server. The chapter then goes into the basics of configuring Odoo. At the end of the chapter is a useful collection of tips on how to troubleshoot your Odoo installation.

*Chapter 2, Installing Your First Application*, begins by introducing you to the real-world case study that will be used as an example throughout the book. We continue by showing you how to create the company database and configure the basic company settings required to quickly get your first Odoo system up and running. The first module, Sales Management, will be installed, and we will walk through the steps to enter a customer and a product. The chapter concludes by entering a sales order and completing the sale and producing an invoice.

*Chapter 3, Exploring Customer Relationship Management in Odoo*, starts with a basic overview of CRM systems and their importance in today's modern business environment. After we cover the installation of the CRM application, a lead is entered for our sample company. We will demonstrate the CRM workflow by turning the lead into a customer. Next, a quote is generated for our newly acquired customer, and a call is scheduled for follow-up by using Odoo's meeting functionality. We also cover the OpenChatter feature that is used throughout Odoo to provide notes and messages associated with Odoo documents.
Chapter 4, *Purchasing with Odoo*, shows us how to install the purchasing application, set up suppliers, and begin purchasing and receiving products in Odoo. Later in the chapter, you learn how to tie purchasing into sales orders to automatically generate draft purchase orders based on your business requirements.

Chapter 5, *Making Goods with Manufacturing Resource Planning*, begins to explore some of the primary functionalities of ERP systems for manufacturing operations. You will learn how to set up your manufacturing orders and define the bill of materials to specify the raw materials that will go into your final products. Manufacturing operations can then be extended with routing and work centers to give you more control over tracking time and resources.

Chapter 6, *Configuring Accounting Finance*, discusses the Accounts Receivable and Accounts Payable basic functions. Next, we will introduce the Chart of Accounts and discover how to set up fiscal periods. This chapter will also include the basic accounting reports and how to close a period.

Chapter 7, *Administering an Odoo Installation*, begins by discussing the overall considerations for implementing Odoo into a business environment. This includes advice on server configurations, documenting your processes, and the importance of considering business continuity. We then go into how to manage users, groups, and set up security roles to manage access to various applications within Odoo. Finally, we look at how to implement Internationalization for multiple languages and currencies.

Chapter 8, *Implementing the Human Resources Application*, begins by installing the basic HR applications and goes over the employee directory. Other topics in the chapter will include timesheets, the recruitment process, and leave management. At the end of the chapter, we will look at how to create online interviews and hire employees using the tools in Odoo.

Chapter 9, *Understanding Project Management*, covers the features of the Project Management application in Odoo. We will create a project, see how to enter tasks and tie a project to a specific customer. Next, team members are assigned to the project, and we configure task stages. We then will go over real-world examples of using the Project Management application to more easily manage complex orders and customer needs. Finally, we see how Project Management can be used along with analytic accounting to provide better reporting.

Chapter 10, *Creating Advanced Searches and Dashboards*, demonstrates how to utilize the advanced search features and configure custom dashboards in Odoo. By the end of the chapter, you will be able to create and save custom searches to reuse later, as well as add search results to dashboards.
Chapter 11, Building a Website with Odoo, is dedicated to exploring Odoo's powerful new website building platform. At the beginning of the chapter, we will look at what a CMS (Content Management System) is and some of the other popular website building platforms. We follow along with Odoo's website building tutorial and then look at the features that can be used to promote your website right from within Odoo.

Chapter 12, Implementing E-Commerce with Odoo, builds on the previous chapter by adding a fully functioning online shopping cart to the website. We see how to publish products to the website and the various options to change their appearance. Midway through the chapter, we cover product variants that add additional flexibility to how you manage your products within Odoo. Finally, we conclude by examining how to set up a payment processor to take payment online through PayPal.

Chapter 13, Customizing Odoo for Your Business, explains how to enter the developer mode for making a variety of custom changes to Odoo. We will walk through the steps to add fields to the sales order form and then include the fields in tree views for sorting and reporting. From here, we will get into advanced configuration topics to better customize Odoo for your specific business requirements.

Chapter 14, Modifying Documents and Reports, goes over the basic reporting mechanisms available in Odoo and weighs up the advantages and disadvantages of the various options. We learn how to use the powerful qWeb template language to modify the default Odoo sales order form.

Chapter 15, Understanding Workflows, introduces the workflow editor and analyzes the basic sales order workflow. Using our case study example, the workflow is modified to improve the flow of information through the business. By the end of the chapter, you should have a basic understanding of modifying workflows to better handle unique business processes.

Chapter 16, Discovering Custom Odoo Modules, introduces the process of developing custom solutions in Odoo. We build on what we learned in Chapter 13, Customizing Odoo for Your Business and create a module that will persist our custom field and views within our module. Next, we build on the workflow modifications we made in the previous chapter and upgrade our module to approve art designs for our real-world example.

Appendix, Locating Additional Odoo Resources, covers a list of resources that can extend your knowledge in supporting an Odoo installation.
Odoo is a powerful set of open source business applications built on the OpenObject framework. When you first install Odoo, the only functionality you will have is limited messaging options between users. From there, Odoo allows you to install the modules you need as you need them. This flexibility makes Odoo much more accessible than many business software solutions.

In this chapter, we will get started working with Odoo by covering the installation and the basics of setting up an Odoo database.

The topics we will cover include:

- Using the free two-user edition of Odoo
- Setting up a trial company
- Installing Odoo on Windows and Ubuntu
- Troubleshooting and configuring your installation

### Getting started with Odoo online

Not long ago, nearly all companies kept their primary information systems in-house. This approach requires not only a lot of capital expense in purchasing servers and software licenses, but also creates a lot of responsibility and risk in backing up data and ensuring business continuity. Today, more and more companies are choosing to host their business applications in online networks commonly known as the cloud. Odoo allows you the flexibility of both options—either hosting on your own hardware, or utilizing Odoo's online software services.
Taking advantage of Odoo online

The best thing about accessing Odoo online is that you can jump in and start using the software right away. You don't have to decide what operating system to use. You don't have to install any software at all. Just enter the URL into your web browser and you are ready to get started.

Another added benefit of taking this approach is that you will verify that your web browser is up to date and compatible with the latest version of Odoo. So, even if you intend to install Odoo on your own hardware, it is still worth taking a minute to test out the online trial version of Odoo. Expect to put a great deal of time into determining which Odoo applications are right for your company.

Taking a few hours to use the Odoo online version is time well spent and you can put off installing Odoo until you are more certain it is the right software for your business.

Use the Odoo free edition to verify browser compatibility with any older machines.

Odoo browser requirements

Odoo is designed to run on a variety of modern web browsers. Supported browsers include:

- Google Chrome (recommended)
- Firefox
- Internet Explorer
- Safari

Macintosh users will need to make sure they are running Mac OS X or above. Users running older Macintosh systems are currently having difficulties running Odoo version 7. Also, in my experience, Google Chrome tends to offer the best experience in working with Odoo. Firefox is also often recommended by others in the Odoo community.
Odoo mobile phone and tablet support

Beginning with Odoo 8, Odoo has native support for mobile phones and tablets. Menus are designed to flow and format properly. The new website application even includes a preview within the portal administration to emulate how the site would appear on a mobile phone. While you still suffer many of the limitations that come with a small screen size, the applications are functional and make it even easier for developers to create mobile Odoo applications.

Odoo's mobile application support covers both the Android and Apple iOS platforms. Make sure, however, that for any processes you intend to implement for your business, you test all processes thoroughly for both desktop and any mobile solutions. Smaller screen sizes might make some data unreadable or very awkward to work with.

Accessing the Odoo free online trial

Accessing the online trial version of Odoo online could not be simpler. Just open up your browser and navigate to https://www.odoo.com/start.

You will then be prompted to choose one of more than 20 business applications, as shown in the following screenshot:
Don't worry, you can add more applications later:

Clicking on the appropriate button for the application immediately begins installing your own unique Odoo instance.

For our example, let's go ahead and install the CRM application by clicking on the "Install CRM" button:
Be patient as it can take thirty seconds or longer for the servers to build the database and bring up the starting page. When the installation is complete, Odoo automatically signs you in so you can begin trying out the software. The goal of this approach is to get users to directly start using the software right away and avoid having to fill out lengthy forms or create logins and passwords to begin using the software. It really is just one click and you have your own version of Odoo to play with.

In the preceding screenshot, you can see the screen that appears after installing the CRM application. With it, you can manage your customers, leads, and opportunities. We will discuss the CRM application in detail in Chapter 3, Exploring Customer Relationship Management in Odoo.

Take a few minutes to look around in Odoo to get familiar with the interface. You don't have to worry about breaking anything or doing anything wrong. If you run into problems or get confused, just close your web browser and try again.

This is a demonstration and will only last for one four-hour session. If you close your browser, you will lose your setup and have to start over again.
Continuing to use the trial version of Odoo

At the very top of the Odoo application, just under the address bar in the browser, you will see a message that informs you about how much longer your trial version of Odoo will run before you need to register. Also, remember that it is possible to lose this instance of Odoo before the time runs out.

Clicking on the message will take you to the typical standard signup form to provide your name, e-mail, and other information to register your trial version of Odoo:
After you have filled out the form and clicked on **Start using**, the Odoo application will once again reload. Now, you will see in the top-right-hand corner that you are logged in under the name you provided in the signup form. Also, you will see at the top, a countdown of how many days are remaining in your trial version.

**Subscribing to Odoo**

For 15 days, you can use Odoo for free without subscribing. Once your 15 days run out, you must subscribe to Odoo in order to keep using their enterprise cloud-hosted version of the software. The first two users of Odoo are free indefinitely.

This means you can sign up and continue using Odoo with just two users without having to pay any monthly fees. For additional users, the current pricing is $25 per month, per user at the time of writing. Each application that you use also will incur a monthly cost depending upon the specific application.

The following screenshot is the Odoo Online Pricing calculator in July of 2015:

![Odoo Online Pricing](https://www.odoo.com/pricing-online)

You can locate the Odoo Online Pricing page at [https://www.odoo.com/pricing-online](https://www.odoo.com/pricing-online).

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Odoo Online is priced for employees that use the applications. You are not charged for customers or suppliers that access Odoo through the web portal.
Setting Up Odoo

Depending on your requirements, an Odoo subscription might be a good decision. Installing and maintaining an Odoo installation takes a degree of expertise and has risks for production systems. You must maintain adequate disaster recovery procedures in case of server crashes or hard drive failures. There are also complexities in applying bug fixes and migrating to newer versions of Odoo. This book will help you with many of these tasks. Yet, it can be quite convenient to have an Odoo subscription so you can focus on the functional, rather than the technical, aspects of working with Odoo.

To subscribe to Odoo online and continue using Odoo past the 15 day trial period, click on the **Subscribe to keep it running** link at the top of the page:

![Subscribe to keep it running](image)

**Using Odoo without subscription fees**
If you choose not to pay the subscription fee, do not fear! The remainder of this chapter will assist you with installing Odoo on your own hardware.

**Getting to know the Odoo architecture**
Setting up and managing an Odoo installation will require a basic understanding of the components that make up Odoo. Every business system has a set of technologies and underlying software platforms that are required for the system to function. Fortunately, unless you plan to customize Odoo, you only need to understand the very basics of the Odoo architecture to complete a successful installation.

In this book, we provide a basic overview of the Odoo architecture. If you wish to get more detailed documentation on the Odoo architecture, visit [https://doc.Odoo.com/trunk/server/02_architecture/](https://doc.Odoo.com/trunk/server/02_architecture/).

**Introducing the PostgreSQL database**
Like most ERP systems, Odoo has specific database requirements. In this case, it is PostgreSQL. PostgreSQL is an open source, cross-platform **Object Relational Database Management System (ORDMS)**. While not popular on the scale of Microsoft SQL Server or MySQL, PostgreSQL is an enterprise-class database server with many advanced features. In fact, PostgreSQL stacks up very well against far more expensive databases such as Microsoft SQL Server and Oracle Database.
PostgreSQL runs on every major operating system. For most Odoo installations, Ubuntu is the operating system of choice. However, PostgreSQL will also run quite well under other versions of Linux, Microsoft Windows, and even Mac OS X.

You can learn more about PostgreSQL at [http://www.postgresql.org/](http://www.postgresql.org/).

**Writing code with Python**

The primary programming language of Odoo is Python. Like the other technologies underlying Odoo, the Python language is open source and runs on all the major contemporary operating systems. It is an extremely popular programming language which makes it very easy to find resources to help you get started.

You can learn more about the Python programming language at [http://python.org/](http://python.org/).

**Following the Model-View-Controller design**

Odoo is built upon a Model-View-Controller (MVC) architecture. One of the primary goals of this architecture is to separate the visual display of the information from the business rules and management of the underlying data. For example, if you need to change the way data is organized in the model, it is desirable not to have to make dramatic changes to how you view the data. This is true for maintaining flexibility in viewing data. Today, it is common to have many different client applications sharing the same underlying data.

**Designing models**

The model is essentially the data that makes up your Odoo installation, which is stored in the PostgreSQL database. Odoo is unique, in that, database structures are typically defined by the Odoo modules at the time they are installed. The Odoo framework takes the model definitions and automatically creates the necessary table structures inside the PostgreSQL database. Furthermore, a web interface in Odoo allows administrators to easily extend the Odoo data model in a variety of ways without having to modify the Odoo source code.

**Rendering views**

Each view in Odoo is defined in XML documents. The Odoo framework is responsible for rendering these view files in a web browser. Alternative views can be built to render Odoo functionality upon other platforms such as mobile devices.
Authoring controllers
The controller component of the architecture is where the business logic and workflow rules of the Odoo application are applied. The controller components in Odoo are written in Python code and stored as objects in Odoo modules.

Choosing your installation operating system
In this section, we will discuss some of the advantages and disadvantages of choosing Ubuntu or Windows for your first Odoo installation.

Choosing a Microsoft Windows Odoo installation
For the most part, Ubuntu has been the platform of choice for most Odoo installations. However, there are some reasons why you might choose to run Odoo under a Windows installation.

Some of you who bought this book might have already jumped ahead and installed Odoo on their Microsoft Windows computer. So, for you go-getters, that working installation of Odoo might function just fine for researching and testing its features. Often, the Windows all-in-one installer provides a simple method to get Odoo up and running instantly on your hardware. Basically, you do not have to install a new operating system.

Learning Ubuntu is not required
If you are familiar with Windows and have no Ubuntu experience, you might get going a little faster by sticking with a Windows install for your first setup. Downloading and installing modules and making changes to configuration files will be much easier if you are familiar with the operating system.
Introducing Ubuntu

While Microsoft Windows does not really need an introduction, it is probably worth giving a brief introduction to Ubuntu. In short, Ubuntu (pronounced oo-BOON-too) is a very popular open source operating system based on the Linux kernel. It has enjoyed increasing popularity because it is easy to install and very stable. Ubuntu can be installed either as a server operating system without a graphical interface or as a desktop operating system with a graphical interface that closely resembles Windows.

You can learn more about the Ubuntu operating system and why it is so popular at http://www.ubuntu.com/.

Choosing an Ubuntu Odoo installation

It is generally accepted that Ubuntu is the recommended operating system for running a production installation of Odoo. There are several reasons why this is true:

• **Ubuntu is the primary target platform:** While Odoo is released for Windows and still well-supported, the Ubuntu installation continues to be favored. The development team of Odoo works primarily with Ubuntu for bug fixes and platform releases. It can be expected that, for the most part, Odoo development will be optimized around Ubuntu, not Windows or Mac.

• **Ubuntu is open source:** Installing Odoo on any Windows operating system is going to require a license from Microsoft. While using Odoo on your Windows PC or Mac is a viable and perhaps desirable solution for testing and development, it is unlikely you will want to run Odoo on a Windows desktop system for any production environment. Why? Well, this requires Windows Server, which has much higher license costs than desktop editions. With an Ubuntu installation, you get an entirely open source and virtually cost-free solution.

• **Ubuntu has additional scalability options:** It is possible to configure a more scalable solution under Ubuntu than what you can currently configure under Microsoft Windows Server.

• **Ubuntu has strong community support for Odoo:** The fact is that a vast majority of the production installations of Odoo are running under Ubuntu. When you run into trouble or management issues with your Odoo installation, you may find it easier to get assistance if you are running an Ubuntu installation.
Choosing another OS option for Odoo

Although this book will focus on Windows and Ubuntu installations, you do have several other options. In the past, Odoo has been deployed under a variety of Linux distributions and even on the Macintosh OS. There are also many community members actively developing client frontends for mobile platforms such as Google's Android OS.

Understanding Odoo releases

When deploying an Odoo system, it is important to understand the various Odoo versions, as well as the release and upgrade policies. There is currently one major release for versions 6.0, 7.0, and 8.0, as well as a master branch that is the latest development version which will soon become Odoo Version 9.0. The stable versions are the standard support version of Odoo and, typically, the one you should choose to install for most situations. The master version is the development version and will often contain bugs and unfinished features. This is primarily downloaded by developers or those who wish to get a look at the latest features.

Upgrading Odoo

The goal of the Odoo development team is to release two stable version upgrades each year. Odoo further labels some stable versions as Long Term Support (LTS) versions. These releases are supported by Odoo for those that have an Odoo Enterprise support contract. For any production environment, it is smart to choose an LTS version. Most importantly, installing an LTS release of Odoo will make bug fixes and patches much easier to implement.

At the time of writing this, the most recent stable LTS version is version 8.0.
Installing Odoo on Windows OS

We begin our installation by locating the packages that are currently available to install. You can find the current list at http://nightly.odoo.com/.

The preceding screenshot is the Odoo Nightly builds page that is the jumping off point for downloading the source files for installation.
The examples and case studies in this book use Odoo 8.0. This means you should select the 8.0 LTS (stable) version of Odoo to download. You can navigate directly to the 8.0 Odoo downloads here \texttt{http://nightly.odoo.com/8.0/nightly/}.

It is entirely possible that Odoo will change the URL as new versions are released. To best follow the examples in this book, download an 8.x installation of Odoo.

Windows installations use the EXE packages. Click on the \texttt{exe} directory to get the list of downloads that are available.

Naturally, the specific download packages are going to change on a nightly basis.
The latest version of the stable LTS release will contain the most current Odoo built with bug fixes included and will appear at the bottom of the list. By the way, the upload dates you’ll see are in Coordinated Universal Time (UTC) and, therefore, might be many hours ahead of your time zone, especially if you live in the Western Hemisphere.

**Performing an all-in-one Odoo installation on Windows**

Installing Odoo using the all-in-one package is very simple. After the package has finished downloading, double-click on the .exe file to begin the installation wizard.

The first screen will prompt you to select the language for your installation.

After you have selected the language and clicked on OK, the wizard will continue with the installation. From here, everything will continue like a normal Windows installation.

I highly recommend that you choose the Custom install, so you can select the directory for installation. The default directory name contains the lengthy build number making it rather difficult to work with in the command prompt.

**Configuring Postgres on Windows**

During the installation, you will be asked to provide information for the PostgreSQL connection.

It is recommended that you change the username and password for security purposes. These values will be written into the Odoo configuration file. The username and password provided will be the administration credentials for the PostgreSQL database, so be sure to remember them.

After the wizard is complete, if you leave Start Odoo checked and then click on Finish, Odoo should open up in your default browser.

If Odoo fails to launch, you can look at the Troubleshooting Odoo Installations section later in this chapter for solutions to some of the problems commonly encountered during installation.
Installing Odoo on Ubuntu
This book will walk you through the installation procedure for Odoo on Ubuntu using the latest all-in-one nightly package. Depending on your Ubuntu installation and how you want to work with Odoo, there are alternative installation methods.

At the time of this writing, Odoo is most commonly installed on Ubuntu Version 14.04.

Modifying the sources.list file
Installing Odoo on Ubuntu is easy when you use the Debian repository. You can use any standard text editor, such as Nano, to modify the /etc/apt/sources.list file and add the following line:

```
deb http://nightly.Odoo.com/8.0/nightly/deb/ ./
```

This installs the package.

After saving sources.list, you can start the installation process by entering these commands into a terminal window:

```
sudo apt-get update
daudo apt-get install openerp
```

The Odoo packages will be first downloaded and then installed. This is an all-in-one installation and should set up all the necessary packages, PostgreSQL, and library dependencies required to run Odoo.

Take note that the installation itself still uses openerp, instead of the new odoo brand name.

Testing your Odoo installation
Point your browser to http://localhost:8069 and you should see the Odoo login page appear.

Troubleshooting and Odoo management tips
As far as ERP installations go, Odoo is typically very easy to install. Unfortunately, it is possible for an installation to fail for a variety of reasons. In this next section, we will discuss some of the most common installation issues and provide some troubleshooting tips for diagnosis problems with an Odoo installation.
Checking your browser destination
If you have followed the default installation, then your Odoo installation should be accessing Odoo at http://localhost:8069.

Make sure the URL is exactly as you can see it above. If you did change the port number during installation, make sure you change the port in the URL.

Verifying that the Odoo service is running
If you are unable to pull up Odoo in the browser, it can be good to verify that the Odoo services are running.

Checking for Odoo services running in Windows
Pull up the Task Manager and go to the Services tab, then look for Odoo-server8.0. The status should be running, as shown in the following screenshot:
Here is an example of the Odoo-server-8.0 service successfully running on Windows. Additional Odoo troubleshooting steps for Windows can be found at https://doc.odoo.com/install/windows/server/complementary_install_information/.

**Checking for Odoo services running in Ubuntu**

In Ubuntu, you can locate the Odoo services by running the following command in a terminal window:

```
ps aux | grep Odoo
```

You will then see the Odoo service listed if it is running.

**Starting and stopping Odoo services in Ubuntu**

When managing an Odoo server, one of the most common tasks you will find yourself performing is starting and stopping the Odoo services. Odoo allows you to start and stop the services with a command switch.

To start the services, use:

```
sudo /etc/init.d/Odoo-server start
```

To stop the services, use:

```
sudo /etc/init.d/Odoo-server stop
```

**Finding the primary Odoo log file**

Odoo writes many messages, warnings, and error messages to a log. Often, when troubleshooting problems, this log file is valuable in determining what action you should take. In a default installation, the log file is located at `{install directory}/server/server/Odoo-server.log`.

The log is especially valuable to locate problems you may have when installing new modules.

**Modifying the Odoo configuration file**

The Odoo framework allows you to specify a configuration file for your installation. By default, this file is located at `/etc/Odoo/Odoo-server.conf`.

Using this file, you can change many of the attributes of Odoo.
Changing port numbers

By default, Odoo runs on port 8069. For many installations, the default port will work fine. There are situations, however, where it can be useful to change this default port. One common scenario would be the need to run more than one version of Odoo. Multiple installations cannot run on port 8069, so you will need to modify the port. Sometimes there are security reasons behind changing ports, as many hackers are aware of the default ports that people use.

Fortunately, changing the default port number is easy.

Simply specify:

\[ \text{Port} = \{\text{port}\} \]

For example, Port=8059 will change the default port for the web client to port 8059.

Accessing the database management tools

Odoo offers database management tools that can be accessed easily through your web browser. This makes it easy to create, backup, and even delete database, all through a web interface. While there are sometimes links available on the login page that will take you to these tools, it is possible that when installing some applications, such as the website builder, you will not find a link easily.

To access the database management tools, use the following path:

\[ \{\text{ServerAddress}\}:\{\text{port}\}/\text{web/database/manager} \]

Changing the admin password

As mentioned earlier, by default, Odoo sets the password for these operations to admin. To secure your server, it is necessary to change this password in your configuration file:

\[ \text{Admin\_password} = \{\text{your\_password}\} \]

Also, be careful while starting up your Odoo server from the command line without specifying an alternative password or the path to the configuration file. If you do, you leave the instance open with the default password.

Finding additional resources for installing Odoo

Installing and configuring Odoo can quickly become a very complex task that is outside the scope of this book. In Appendix, Locating Additional Odoo Resources, you will find links to additional resources that can assist you with installing Odoo.
Summary

In this chapter, we saw how easy it was to get started using Odoo online. We discussed how to set up a trial company and the basics of creating a database and installing your first module. If you choose not to use the online services, you likely found the topics on installing Odoo on Windows or Ubuntu helpful. Finally, we discussed various methods of troubleshooting and configuring Odoo.

In the next chapter, we will begin to jump into our first real business applications in Odoo. You will get introduced to our real world case study and set up the basic configuration of the company. We will walk you through setting up your first product and, finally, creating and printing your first sales order.
Where to buy this book

You can buy Working with Odoo from the Packt Publishing website.

Alternatively, you can buy the book from Amazon, BN.com, Computer Manuals and most internet book retailers.

Click here for ordering and shipping details.