

# Zone Manager

## Example Deployment Guide

### Introduction

The purpose of this Example Deployment Guide is to assist you in installing the Zone Manager server and to provide an example configuration that will enable the Zone Manager to display real-time information from your tagged assets. Following the setup steps outlined in this document, you will be able to establish network communication with RF Code Readers to configure settings and to receive continuous tag information.

Zone Manager provides two interfaces that allow users to issue configuration and update commands to the Zone Manager server. The commands issued to the Zone Manager are performed over a telnet session or over HTTP request. Zone Manager also provides a URL that is used to import configuration files to the server. The configuration files can be used for restoring configuration data or for performing a mass configuration for multiple readers.

This example configuration will use the import URL and HTTP commands that will be issued from a browser. A set of four files are included on the Zone Manager CD that will require some modification to setup the example configuration with your readers. Although telnet style commands will not be used in this document, both HTTP and telnet interfaces implement the equivalent set of commands. Please refer to the [Zone Manager User Manual](#) and [API](#) documents for detailed instructions on using the Zone Manager software and API commands.

**Note**

Zone Manager uses port 6501 for the command-response interface and port 6502 for the tag change events interface for telnet sessions. The HTTP communications are performed on port 6580.

The setup of Zone Manager will require:

- 1) **Installation of the Zone Manager software.**
- 2) **Input of Zone Manager License Key.**
- 3) **Configuration of reader network and security settings.**
- 4) **Creation of Zone Manager configuration import files.**
- 5) **Importing of the configuration files.**
- 6) **Browsing to the active Zone Manager Server.**
- 7) **Configuration of Zone Manager.**

# 1 Install the Zone Manager Software

## Requirements

Zone Manager Server:

- Pentium Dual-Core or Athlon-Class Processor
- 1GB RAM
- 300MB Free Disk Space
- Windows XP, Service Pack 2 or Windows Vista, or RedHat Enterprise Linux 5, or Fedora 8



Administrator access on Windows or root access on Linux is required for installation.

Zone Manager Client:

- Internet Explorer 6, 7
- Firefox 1.5, 2

## Linux Installation

Locate the RPM file on the Zone Manager software CD in the \install\linux directory and execute the following command:

```
rpm -ivh rfcode-zonemgr-<version-buildID>.noarch.rpm
```

## Windows Installation

Locate and run the [setup.exe](#) installation program on the Zone Manager CD in the \install\windows directory. Follow the wizard prompts to complete installation.



## 2 Input License Key

After the Zone Manager installation is completed the Zone Manager server will automatically start. You can verify that it is running by accessing it with a browser using URL:

**[http://<hostname>:6580/rfcode\\_zonemgr/](http://<hostname>:6580/rfcode_zonemgr/)**

Where `<hostname>` is the IP address of the Zone Manager server. Use `localhost:6580` if the browser is running on the same server as the Zone Manager. All browser communication is over port 6580. The Summary panel will display the Zone Manager version, build and license information.



There will be NO reader or tag information displayed until the Zone Manager is configured.

The Zone Manager server is installed with a five reader license. If you have purchased additional license keys you can add them to enable the Zone Manager to communicate with more than five readers. Additional licenses can be purchased by contacting your RF Code Authorized Reseller or Sales Representative or by emailing [sales@rfcode.com](mailto:sales@rfcode.com).

To input the Zone Manager license key use the following URL command:

**[http://<hostname>:6580/rfcode\\_zonemgr/zonemgr/api/licenseadd?key0=AAAA-BBBB-CCCC-DDDD](http://<hostname>:6580/rfcode_zonemgr/zonemgr/api/licenseadd?key0=AAAA-BBBB-CCCC-DDDD)**

where `AAAA-BBBB-CCCC-DDDD` is the license key to install on your server. The summary panel will indicate the addition of the license key.

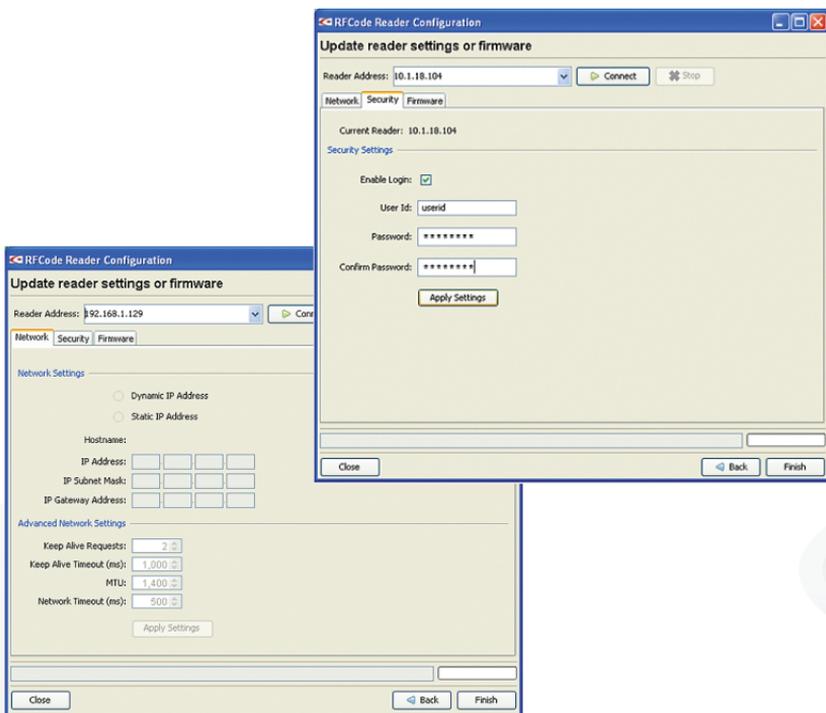
# 3 Configure RF Code Readers

At this point, the Zone Manager software should be enabled to communicate with the RF Code Readers. You can now access the Reader Configuration Utility (RCU) to configure the IP address and security of the readers that can be added to Zone Manager. The RCU is located on the Reader Utilities CD or it can be downloaded from the RF Code support site at:

[http://www.rfcode.com/support\\_downloads](http://www.rfcode.com/support_downloads)



Be sure to keep a list of Reader Type, IP address and login information for each reader that will be used by Zone Manager. This information will be required in the configuration files. Please refer to the [ReaderConfigurationUtility\\_UserManual.pdf](#) document for detailed instructions on using the RCU.



# 4 Create Zone Manager Configuration Files

There are four files that will be used to setup a general Zone Manager configuration. These files are in an Excel comma separated format (.csv extension). Although these files can be updated by any editor, Excel is the preferred application to use for editing these files. The four files used to setup the Zone Manager configuration - `example_config_groups.csv`, `example_config_readers.csv`, `example_config_locations.csv` and `example_config_rules.csv` - are located on the Zone Manager CD in the \Samples directory.



This Zone Manager example configuration will enable **only one RF Code reader**. Multiple readers can be added at a later time.

To setup the Zone Manager configuration on your server:

- » Copy each of the four configuration files from the CD to a system with network connectivity to the Zone Manager server.



Prior to importing these files to the Zone Manager server the `example_config_groups.csv` and `example_config_readers.csv` files will need to be updated with the specific configuration data of your reader.

- » Open the `example_config_groups.csv` files and verify that your tags have one of the seven listed group codes in the `example_config_groups.csv` file. (Tag group codes are printed on the bottom left of each tag label. The group codes are six letters in length with all letters capitalized.) If your tags have a group code of RFCLOC, LOCATE, RFCRCK, RFCBDG, RCKDOR, RFCDOR, or Tmprck then you do not need to update the `example_config_groups.csv` file.



If you have a tag with a different group code then open the `example_config_groups.csv` file and add a row including a unique name for the `example_config_group.id` column. In the group type column, add a mantisTTS where TTS is your tag's treatment code and treatment sub code. Lastly, in the `group.groupcode` column enter the tag's group code.

	A	B	C	D	E	F	G
1	group.id	group.type	group.groupcode				
2	badge	mantis04A	RFCBDG				
3	rackdoor	mantis04C	RCKDOR				
4	rfcrcrk	mantis04A	RFCRCK				
5	temp	mantis04D	TMPRCK				
6	irtag	mantis04A	RFCLOC				
7	locate	mantis04A	LOCATE				
8	roomdoor	mantis04C	RFCDOR				
9							

Next open the example\_config\_readers.csv file and edit the following data for the first reader listed READER\_01:

- » Change the reader.type entry if your reader is a R200, J200, or D200.
- » Update the reader.hostname entry with the IP address of the reader configured in Part 3.
- » Update the reader.userid and reader.password entries if the readers were configured with login accounts, leave entry fields blank if none were used.
- » If you added your tags group information to the groups.csv file then add the new unique group.id to the reader.groups column list.
- » All other table entries can remain the same.

	A	B	C	D	E	F	G
1	reader.id	reader.type	reader.hostname	reader.userid	reader.password	reader.enabled	reader.groups
2	READER_01	M200	192.168.1.129			TRUE	rackdoor,rfcrck,badge,temp,irtag,locate,roomdoor
3							
4							
5							
6							
7							
8							
9							
10							



For this example, the `example_config_locations.csv` and `example_config_rules.csv` files do not need to be updated but are used in this example configuration. These files will require alteration for setup with the Mass Configuration Import explained in Step 5.

The `example_config_locations.csv` file is used to configure specific location information (such as regional area, row location, rack number, etc.).

The `example_config_readers.csv` file is used to configure the reader channel SSI rule.

For more information regarding the use of these files as part of the Zone Manager configuration please refer to the [Zone Manager User Manual](#) or [API](#) documents.

**All four of the configuration files are now ready to be imported to the Zone Manager server.**

# 5 Import the Mass Configuration files

1. Now the configuration files are complete, open a browser to the Zone Manager configuration panel to import data URL:

[http://<hostname>:6580/rfcode\\_zonemgr/zonemgr/cfgimport](http://<hostname>:6580/rfcode_zonemgr/zonemgr/cfgimport)

This Zone Manager page will import the configuration files to the server. To complete the configuration, perform the following steps:



It is important to import the files in proper order to configure the server correctly.

2. Browse to the folder where the files have been copied and select the `example_config_groups.csv` file, then click send. The following output should be displayed:  
`<done>: Group badge created`  
`<done>: Group door created...`

**Check to make sure that the data output matches your csv file data.**

3. Click the browser **BACK** button to go back to the configuration panel. Browse to the folder where the files have been copied and select the `example_config_readers.csv` file, then click send. The following output should be displayed:  
`<done>: Created reader M001`  
`<done>: Set port=6500 on reader READER_01...`

**Check to make sure that the data output matches your csv file data.**

4. Click the browser **BACK** button to go back to the configuration panel. Browse to the folder where the files have been copied and select the example\_config\_locations.csv file, then click send.

The following output should be displayed:

```
<done>: Created location RFCode
```

```
<done>: Set State=TX on location RFCode...
```

**Check to make sure that the data output matches your csv file data.**

5. Click the browser **BACK** button to go back to the configuration panel. Browse to the folder where the files have been copied and select the example\_config\_rules.csv file, then click send.

The following output should be displayed:

```
<done>: Created rule rule01
```

```
<done>: Activated rule_rule_01...
```

**Check to make sure that the data output matches your csv file data.**

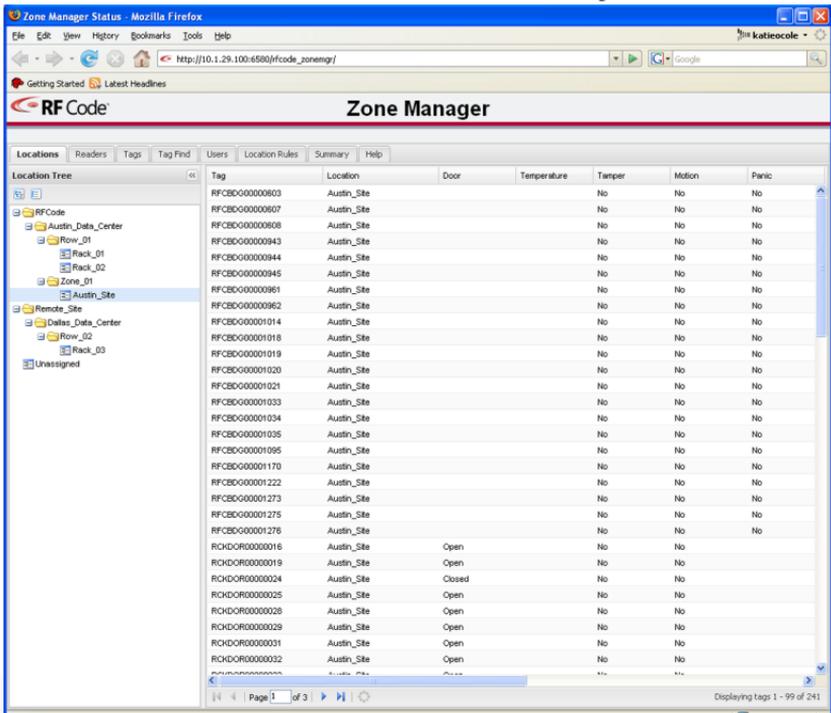
**Upon completion of these steps Zone Manager will be configured and communicating with the RF Code reader.**

# 6 Access tag data from the Zone Manager Status Page

Open a browser to the Zone Manager URL:

**[http://<hostname>:6580/rfcode\\_zonemgr/](http://<hostname>:6580/rfcode_zonemgr/)**

From the Location tab in the Location Tree panel, expand the entire tree and select the Austin\_Site location. You should see one or more of your tags displayed in this location. Locations Rack\_01, Rack\_02, and Rack\_03 will not display tags since they are not currently configured with rules assigned to them. The Unassigned location will contain any tags that have a signal strength level weaker than what is specified by the example\_config\_rules.csv file. If no tags are found verify that your reader is connected by checking the reader status under the Readers tab, it should report ACTIVE.



The screenshot shows the Zone Manager web interface in a Mozilla Firefox browser. The interface has a menu bar (File, Edit, View, History, Bookmarks, Tools, Help) and a title bar (Zone Manager Status - Mozilla Firefox). The main content area is titled "Zone Manager" and has tabs for Locations, Readers, Tags, Tag Find, Users, Location Rules, Summary, and Help. The "Locations" tab is active, showing a "Location Tree" on the left and a table of tag data on the right. The "Location Tree" is expanded to show "Austin\_Site". The table has columns for Tag, Location, Door, Temperature, Tamper, Motion, and Panic. The table displays 24 rows of data, with the first 19 rows having "Austin\_Site" in the Location column and the last 5 rows having "Open" in the Door column. The status bar at the bottom right indicates "Displaying tags 1 - 99 of 241".

Tag	Location	Door	Temperature	Tamper	Motion	Panic
RFCEB000006003	Austin_Site			No	No	No
RFCEB000006007	Austin_Site			No	No	No
RFCEB000006008	Austin_Site			No	No	No
RFCEB000006943	Austin_Site			No	No	No
RFCEB000006944	Austin_Site			No	No	No
RFCEB000006945	Austin_Site			No	No	No
RFCEB000006961	Austin_Site			No	No	No
RFCEB000006962	Austin_Site			No	No	No
RFCEB000001014	Austin_Site			No	No	No
RFCEB000001018	Austin_Site			No	No	No
RFCEB000001019	Austin_Site			No	No	No
RFCEB000001020	Austin_Site			No	No	No
RFCEB000001021	Austin_Site			No	No	No
RFCEB000001033	Austin_Site			No	No	No
RFCEB000001034	Austin_Site			No	No	No
RFCEB000001035	Austin_Site			No	No	No
RFCEB000001095	Austin_Site			No	No	No
RFCEB000001170	Austin_Site			No	No	No
RFCEB000001222	Austin_Site			No	No	No
RFCEB000001273	Austin_Site			No	No	No
RFCEB000001275	Austin_Site			No	No	No
RFCEB000001276	Austin_Site			No	No	No
RCKDR000000016	Austin_Site	Open		No	No	
RCKDR000000019	Austin_Site	Open		No	No	
RCKDR000000024	Austin_Site	Closed		No	No	
RCKDR000000025	Austin_Site	Open		No	No	
RCKDR000000028	Austin_Site	Open		No	No	
RCKDR000000028	Austin_Site	Open		No	No	
RCKDR000000031	Austin_Site	Open		No	No	
RCKDR000000032	Austin_Site	Open		No	No	

Please note that this interface is for “view only” access of Zone Manager tag data. The Zone Manager software must be configured using the **command line interface**. Information about using the command line interface is available in the **Zone Manager API Specification** document.

**Note**

This deployment example covers configuring the Zone Manager server using example configuration files provided for convenience in the initial setup. This configuration setup and any changes can be performed using the individual commands as explained in the [Zone Manager User Guide](#) and [API](#) documentation.

To return the Zone Manager server to an “unconfigured state” you can remove the configuration setup data by using the delete commands associated with groups, readers, locations and rules. For example the `groupdelete` command will remove the configuration data on the server that was imported from the `groups.csv` file. To completely restore the server to the “unconfigured state” perform all four delete commands (`groupdelete`, `readersdelete`, `locationsdelete`, and `rulesdelete`).



To update the configuration of the Zone Manager server, you need only to update the csv files you have created and re-import them. The files do not need to be created again from scratch if you add more readers/racks to your application.

## For More Information

### User Manuals

[http://www.rfcode.com/support\\_downloads](http://www.rfcode.com/support_downloads)

### Data Sheets

<http://www.rfcode.com/library>

### Technical Support

<http://www.rfcode.com/support>

### Frequently Asked Questions

[http://www.rfcode.com/support\\_faq](http://www.rfcode.com/support_faq)



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