**VYKON**® **Tenant Billing Service**

**User's Guide**

# Vykon Tenant Billing Guide

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# VYKON® Tenant Billing Service

## Preface contents

• Document Change Log

## Document Change Log

Updates (changes/additions) to this document are listed as follows.

• April 1, 2011, initial release; Vykon Tenant Billing Service

# Tenant Billing

The Vykon Tenant Billing Service (VTBS) enables users to create flexible and dynamic invoices for tenants through a web browser interface. This document is designed for users who havenot completed the NiagaraAX Certification Training. Fully trained Niagara AX Engineers should refer to the Vykon Tenant Billing Service Guide and the associated help files in WorkbenchAX software.

**Figure 3-1** *Vykon Tenant Billing Service*
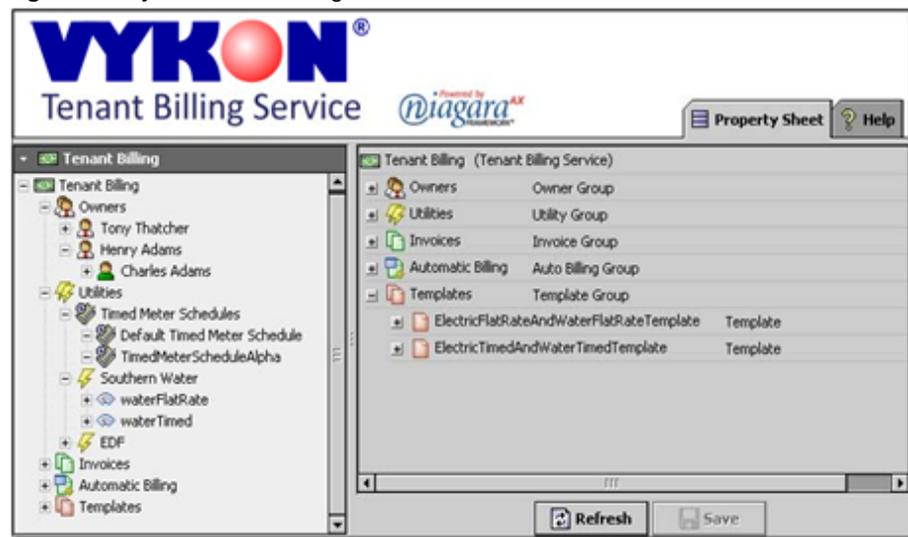


Once the user has logged onto the system through a Java enabled web browser, the user can add Owner, Tenant, Utility, Contract and Meter information to the system. The user then has the ability to produce invoices that can be automatically sent on to Tenants.

The following major sections describe how to use the system:

# Navigating

The Vykon Tenant Billing Service is a made up of a series of objects. These objects are arranged in a tree (just like folders on your computer's hard drive). Also, just like folders, most of the objects can be deleted and renamed.

Once logged onto the system (via a designated user name and password), the user can navigate around the system by double clicking items in the left hand tree control (the Tenant Billing ObjectTree). Once the user has double clicked an item, the main view area will change to reflect the new selection.

To create a new object in the system (i.e. a new Tenant), one double clicks on the parent object in the tree control. This loads the given manager view for adding, editing and deleting objects. For example, each Tenant has an Owner object. To add, edit or delete a Tenant object, a user double clicks on the given Owner to load the Tenant Manager view.

Objects can be cut, copied and pasted via right clicking in the tree. Note: there are rules for cutting and pasting objects. For example, Tenant objects can only sit under Owner objects.

# Owners

An Owner object holds information about the building Owner. To add, edit or delete Owner objects use the Owner Manager view.

## Owner Manager View

The Owner Manager view is the default view available when double clicking on Owners object.

The Owner Manager View consists of a table with a series of command buttons listed at the bottom. More commands are available by right clicking on the table.

Commands
- New
  By clicking this button, a user can add new Owner objects to the system. Once clicked, the user is asked how many Owner objects they wish to add. Clicking OK takes the user to next dialog box of inputting the Owner information. When inputting the information, the user can select a 'Company Logo'. If the final Invoice templates have been set up to show the company logo, then this logo will appear on the Invoice.
- Edit
  By clicking this button, a user can edit the information that has been added to the system.
- Import From CSV
  By clicking this command, a user can import existing Owner information from a CSV file. Simply select the CSV file and click OK. Once the file has finished importing, a report will be presented to the end user on the success of the import operation. To see how to format the CSV file so the data can be imported correctly, export some existing Owner information to a CSV file and then inspect the text that has been created.
- Export
  By clicking this command, a user can export Owner information. Once the 'Export' dialog has appeared, select 'Table to CSV' in the 'Select Exporter' drop down list to create a CSV file from the existing Owner data.

To delete an Owner from the system, simply right click on the Owner and select 'Delete'. Please note, that once an Owner has been deleted from the system, all previously created Invoices that reference this Owner will become invalid! It's better just to disable an Owner instead.

# Owner

An Owner object holds information about the building Owner. An Owner consists of number of Tenant objects.

## Tenant Manager View

The Tenant Manager View is the default view available when double clicking on an Owner object. This view enables the end user to add, edit and delete Tenant objects.

The Tenant Manager View consists of a table with a series of command buttons listed at the bottom. More commands are available by right clicking on the table.

Commands

- New
  By clicking this button, a user can add new Tenant objects to the system. Once clicked, the user is asked how many Tenant objects they wish to add. Clicking OK takes the user to next dialog box of inputting the Tenant information. When inputting the information, the user can select a 'Company Logo'. If the final Invoice templates have been set up to show the company logo, then this logo will appear on the Invoice.
- Edit
  By clicking this button, a user can edit the information that has been added to the system.
- Import From CSV
  By clicking this command, a user can import existing Tenant information from a CSV file. Simply select the CSV file and click OK. Once the file has finished importing, a report will be presented to the end user on the success of the import operation. To see how to format the CSV file so the data can be imported correctly, export some existing Tenant information to a CSV file and then inspect the text that has been created.
- Export
  By clicking this command, a user can export Tenant information. Once the 'Export' dialog has appeared, select 'Table to CSV' in the 'Select Exporter' drop down list to create a CSV file from the existing Tenant data.

To delete a Tenant from the system, simply right click on the Tenant and select 'Delete'. Please note, that once a Tenant has been deleted from the system, all previously created Invoices that referencethis Tenant will become invalid! It's better just to disable a Tenant instead.

# Tenant

A Tenant object holds information about the person (or company) that is going to be billed. A Tenant object consists of a number of Contracts. A Contract object defines how the Tenant is going to be billed.

For more information on Contracts, see

## Contract Manager View

The Contract Manager view is the default view available when double clicking on a Tenant object. This view enables the end user to add, edit and delete Contract objects.

The Contract Manager View consists of a table with a series of command buttons listed at thebottom. More commands are available by right clicking on the table.

Commands

- New
  By clicking this button, a user can add new Contract objects to the system. Once clicked, the user is asked how many Contract objects they wish to add and the type of Contract. Clicking OK takes the user to next dialog box of inputting the Contract information.
- Edit
  By clicking this button, a user can edit the information that has been added to the system.

To delete a Contract from the system, simply right click on the Contract and select 'Delete'. Please note, that once a contract has been deleted from the system, all previously created Invoices that reference this Contract will become invalid! It's preferred that Contracts be disabled if they're no longer used.

# Contract

When an Invoice is generated, it uses a Contract to piece all of the information together. The Contract contains references to all of the other objects used in calculation of an Invoice. For example, a Contract contains references to a Template (the graphical template used when displaying an Invoice) and the various Meters (Flat Rate Meter and Timed Meter objects are used to generate the bill).

The Contract consists of the following properties:

*Contract properties*

•**Description**
A description for the Contract.

• **Currency**
The symbol for the currency (i.e. $).

•**Include Tax**
Choose whether to add tax on to the bill calculation. If this is set to false, the 'Tax rate percentage' will not be used in calculating the Invoice.

•**Tax rate percentage:**
If the 'Invoice Tax' property is set to true, this percentage will be used to calculate the Invoice.

• **Management Fee:**
This value is added onto the Invoice.

• **Facilities Improvement Fee**
This value is added onto the Invoice.

•**Surcharge**
This value is added onto the Invoice.

• **Meter**
A Contract can use multiple Meters to generate an Invoice. Clicking the '+' symbol adds a Meter whereby the user can select the Utility and Meter from a drop down list. Clicking the cross symbol removes the Utility (or Meter) from the list. Each Meter also has a percentage value associated with it. For example, a Meter could be split to between two Tenants by using a Meter percentage value of '%50'.

# Utilities

A Utility object holds information about the Utility company (i.e. the company that supplies the electricity). To add, edit or delete Utility objects use the Utility Manager view.

*Utility Manager View*

The Utility Manager view is the default view available when double clicking on Utilities object.

The Utility Manager View consists of a table with a series of command buttons listed at the bottom. More commands are available by right clicking on the table.

Commands

- New
  By clicking this button, a user can add new Utility objects to the system. Once clicked, the user is asked how many Utility objects they wish to add. Clicking OK takes the user to next dialog box of inputting the Utility information. When inputting the information, the user can select a 'Company Logo'. If the final Invoice templates have been set up to show the company logo, then this logo will appear on the Invoice.
- Edit
  By clicking this button, a user can edit the information that has been added to the system.
- Import From CSV
  By clicking this command, a user can import existing Utility information from a CSV file. Simply select the CSV file and click OK. Once the file has finished importing, a report will be presented to the end user on the success of the import operation. To see how to format the CSV file so the data can be imported correctly, export some existing Utility information to a CSV file and then inspect the text that has been created.

- Export
  By clicking this command, a user can export Utility information. Once the 'Export' dialog has appeared, select 'Table to CSV' in the 'Select Exporter' drop down list to create a CSV file from the existing Utility data.

To delete a Utility from the system, simply right click on the Utility and select 'Delete'. Please note, that once a Utility has been deleted from the system, all previously created Invoices that reference this Utility will become invalid! The preferred method is to disable the Utility. Once a Utility isdisabled, it's Meter cannot then used to generate any more Invoices.

# Utility

A Utility object holds information about the Utility company (i.e. the company that supplies the electricity). A Utility consists of Meters. Each Meter holds a direct reference to the Log the Niagara AX system is recording.

## Meter Manager View

The Meter Manager view is the default view available when double clicking on a Utility object. Thisview enables the end user to add, edit and delete Meter objects.

The Meter Manager View consists of a table with a series of command buttons listed at the bottom. More commands are available by right clicking on the table.

A Meter can be a Flat Rate Meter or a Timed Meter.

Commands
- New
  By clicking this button, a user can add new Meter objects to the system. Once clicked, the user is asked how many Meter objects they wish to add. Clicking OK takes the user to next dialog box of inputting the Meter information. A Meter has a reference to a recorded Log within the system. Please select the Log for valid Invoices to be calculated!
- Edit
  By clicking this button, a user can edit the information that has been added to the system.

To delete a Meter from the system, simply right click on the Meter and select 'Delete'. Please note, that once a Meter has been deleted from the system, all previously created Invoices that reference this Meter will become invalid! The preferred method is to disable a Meter. Once a Meter is disabled, no more Invoices will be produced.

# Flat Rate Meter

A Meter is used to store a direct reference to the actual Log data. Its parent object is a Utility object. When an Invoice is generated using this Meter, the system simply multiplies the calculated consumption value by the Utility Rate of the Meter. The consumption value is the end value - start value taken from the end and start date from the Meter.

**Note:** *A Meter can also be disabled. Once a Meter is disabled, previous Invoices can still be viewed but no additional Invoices can be generated with it.*

## Flat Rate Meter Properties

A Meter has the following configurable properties:

**Description**
holds a description of the Meter information

**Reference**
this is an advanced feature used for specifying the Meter to display when viewed in a graphical format

**Meter type**
selects what type of Meter this object represents

**History Identifier**
The Id of the Log this Meter is linked too. A log will hold the time value information recorded from a Meter by the Niagara AX system.

**Utility Rate**
Used to calculate the Invoice.

# Timed Meter

The Timed Meter uses the periods and values set up on a schedule to calculate how much the Tenant should be charged when the Invoice is generated. For example, a user configures the schedule so between the hours of 9 till 5, the Tenant will be charged a rate of 2 for the electricity they consume. Therefore, from the Meter log the start and end value from 9 till 5 will be subtracted from each other and then multiplied by 2 to calculate the value.

A Meter can also be disabled. Once a Meter is disabled, previous Invoices can still be viewed but no more Invoices can be generated with it.

The different times and tariffs are configured through a Timed Meter Schedule.

*Timed Meter properties*

A Meter has the following properties that can be adjusted:

**Description**
holds a description of the Meter information

**Reference**
this is an advanced feature used for specifying the Meter to display when viewed in a graphical format

**Meter type**
selects what type of Meter this object represents

**History Identifier**
The Id of the Log this Meter is linked too. A log will hold the time value information recorded from a Meter by the Niagara AX system.

**Timed Meter Schedule**
used to select the Timed Meter Schedule to use.

# Timed Meter Schedules

Timed Meter Schedules hold varying number of time-dependent rates used by Timed Meters. For more information regarding Timed Meters see <span style="color:blue">"Timed Meter"</span> on page 3-6.

*Timed Meter Schedule Manager View*

The Timed Meter Schedule Manager view is the default view available when double clicking on Timed Meter Schedules.

The Timed Meter Schedule Manager View consists of a table with a series of command buttons listed at the bottom. More commands are available by right clicking on the table.

Commands
- New
  By clicking this button, a user can add new Timed Meter Schedule objects to the system. Once clicked, the user is asked how many Timed Meter Schedule objects they wish to add. Clicking OK takes the user to next dialog box. A user can then click 'Edit' to edit the schedule. For more information on configuring the Timed Meter Schedules, please click here.
- Edit
  By clicking this button, a user can edit the information that has been added to the system.

# Timed Meter Schedule

A Timed Meter Schedule provides the user with the facility to create multiple tariffs at different rates. It is used in conjunction with Timed Meters.

A Timed Meter uses the periods and values set up on a schedule to calculate how much the Tenant should be charged when the Invoice is generated. For example, a user configures the schedule so that between the hours of 9 and 5, the Tenant will be charged a rate of 2 for the electricity they consume..Therefore, from the Meter log the start and end value from 9 through 5 will be subtracted from each other and then multiplied by 2 to calculate the value.

## *Setting up the Schedule*

### Setting up the normal weekly times and rates

When editing the Schedule times and rates, the user is presented with a dialog box with four tabs.The first tab entitled 'Weekly Schedule' allows the user to set up the default time periods and rates for the given contract. The 'Weekly Schedule' tab shows all the days of the week starting from Sunday horizontally. The times are shown vertically.

Step 1    To create a new time period, simply click on one of the days and drag the mouse vertically downwards. This will in turn create a colored bar.
This bar defines the time period and rate the Tenant will be charged for on that day between those times. The colored bar can be dragged and expanded to fill the available times needed as shown in the dialog below.

**Figure 3-2** *Creating a new time period*
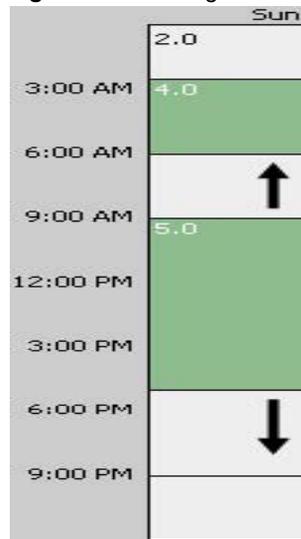


Step 2    When a bar is selected, its color will change to highlight itself. When a bar is highlighted, the 'Event Start', 'Event Finish' and 'Event Output' will show the bars current values. To change the rate being used for thattime period edit the 'Event Output' edit box while noting not to tick the 'null' tick box.

Step 3    By right clicking on one of the bars, the user is presented with various options to replicate that timeperiod and rate across many days, delete the event or even cut and paste it to another schedule.

### Setting up a special event

A special event represents a special day for the Tenant. For example, the user may want to charge the Tenant a different rate during a holiday.

Step 1    To add a new special event, go to the 'Special Events' tab and click the 'Add' command button. This will ask you to input a special time. For example, you could create special event to run every month or justcreate it as a one off.

Step 2    Once you have chosen the date, click the OK button. The new special event will appear in the list. The special event can now be selected and the times edited.

**Figure 3-3** *Setting up a special event*
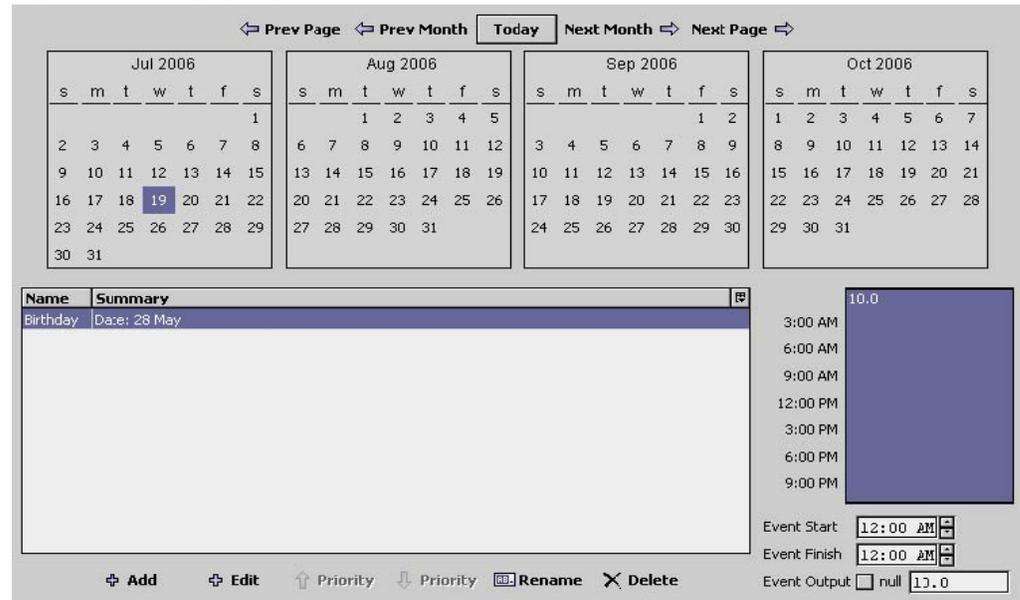


Setting up an out of hours (default) rate

Note the following points about setting up a default rate:

- A default "out of hours" rate can be set up on the 'Properties' tab by editing the edit box marked as 'Default Output'. Therefore, if there is not a time period set up on a given time for the given week day or special event, this rate will be used. For example, the diagram below shows a normal weekday. If an out of hours rate of 2 is specified, then for all the white spaces defined in the time grid (time blocks) in the day, the default rate will be used.

**Figure3-4***Setting up an out of hours (default) rate*
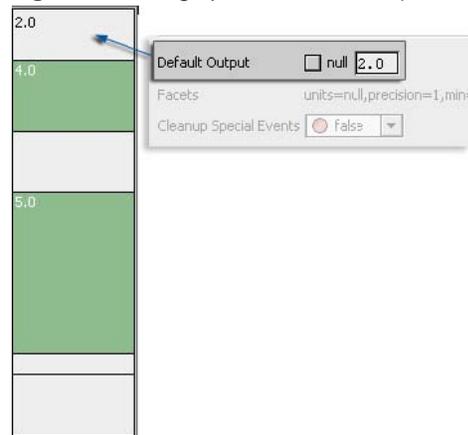


- There are other properties on the 'Properties' tab. Under typical conditions, do not change the 'Cleanup Special Events' value to true as this could prematurely delete any special event entries you have created in the schedule.

Viewing the Schedule Summary

The 'Summary' tab shows a summary of all the information that has been set up on the schedule, including special events. The command buttons listed at the top of this dialog allow the user tonavigate back and fourth between different months to see how the schedule has been set up.

## An example of an Invoice being calculated

The following illustration shows an example of how part of the invoice is calculated:

**Figure 3-5** *Invoice calculation summary*
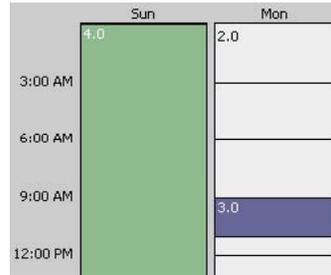


 Notice the following about the example shown above:

- The Numeric Schedule has an output value of 3 between the hours of 9:00 and 11:00 A.M. In this case3 is the 'in hours rate'.
- The start value is the value from the Meter history before or equal to 9:00 A.M.
- The end value is the value from the Meter history before or equal to 11:00 A.M.
- Therefore, to calculate the invoice (end value - start value) * rate in this case is rate=3. This value is used in computing the included hours cost.
- This calculation is repeated between the start and the end date specified for the invoice. The invoice calculation also takes into account the following:
    - The default output of the schedule. The default output is the "out of hours" (default) rate. For example, the above picture shows an out of hours rate of 2 between the hours of 12:00 and 9:00 A.M. (in the white time blocks). The value calculated using this rate will get used to compute the total out of hours cost.
    - Special events The normal hours can be 'overridden' by a special event. The special event can specify an alternative set of times and rates to be used for a day.
    - Effective periodThe effective period gets taken into account when computing the invoice. If the start and end dates specified for calculating the invoice fall outside the effective period, the out of hours rate will be used (if specified).

# Invoices

This object shows the Invoice History Manager. This allows previous Invoices to be reviewed.

The secondary view shows an Audit trail of all the Invoices generated throughout the lifetime of the system.

# Automatic Billing

Automatic Billing is used to complete the billing process. For example, at the end of every month an Invoice is generated, automatically saved to disk and attached to an email that's sent.

For more information regarding Automatic Billing see "Automatic Billing Profiles" on page 3-10.

*Auto Billing Profile Manager View*

The Auto Billing Profile Manager view is the default view available when double clicking on Auto Billing.

The Auto Billing Profile Schedule Manager View consists of a table with a series of command buttons listed at the bottom. More commands are available by right clicking on the table.

Commands
- New
    By clicking this button, a user can add new Automatic Billing Schedule objects to the system. Once clicked, the user is directed through a wizard.
- Edit
    By clicking this button, a user can edit the information that has been added to the system. Again a wizard is used for configuration.

# Automatic Billing Profiles

An Automatic Billing Profile is used to help automate the billing process. Once a billing profile has been created, it can be applied to an Owner (and be overridden by a Tenant). The billing profile isthen scheduled to run at a specific time (i.e. every month) to generate all of the Invoices for the specified Tenants.

**Note:** *Users do not have to use an Automatic Billing Profile if they want to manually generate the Invoices each time. Invoices can be manually generated from the Owner, Tenant and Contract Manager views.*

The configuration options are set up in a wizard when using the Auto Billing Profile Manager viewas shown in the following illustration.

**Figure 3-6** *VTBS Automatic Billing Wizard*



## *Automatic Billing Profile properties*

In addition to scheduling Invoice Generation, a Profile can also specify the following parameters that appear on successive views of the Automatic Billing Profile Wizard:

**Schedule**

This is the first screen of the wizard and specifies when an Invoice can be regularly generated. By default this is set to 'No Schedule'. It is a good practice to leave the Default Automatic Billing Profile set to 'No Schedule'. If the user doesn't want to set a monthly trigger of producing the Invoices, theCustom option can be used. This allows the user to use a special Trigger Schedule interface to specify the times use to generate the Invoice. The Trigger Schedule can be accessed by double clicking on a Automatic Billing Profile that has its schedule option set to custom.

**Next start date**

An Invoice is always generated between two dates. When an Automatic Billing Profile is used, the end date is the current day the Automatic Billing Profile executes while the start date was the last time it was triggered.

**Adjustments**

Adjustments are added to the final total of an Invoice (pre-tax). An adjustment description can alsobe typed into the provide text field, if necessary.

**Save Invoices to PDF**

When an Invoice is automatically generated, it can be saved to a file. By selecting this option box inthe wizard, the user can specify the directory where the file is saved.

**Send Email**

This option allows you to specify that an email is sent and configure the email properties. When this option is selected, an Invoice is automatically generated. Also, with the Save Invoices to PDF option selected, a PDF file can be generated and attached to the email. By selecting this box in the wizard, a user can specify the configuration options for the email, as shown in the following illustration and described below:

*Figure 3-7* *Email properties in the Automatic Billing Profile wizard*
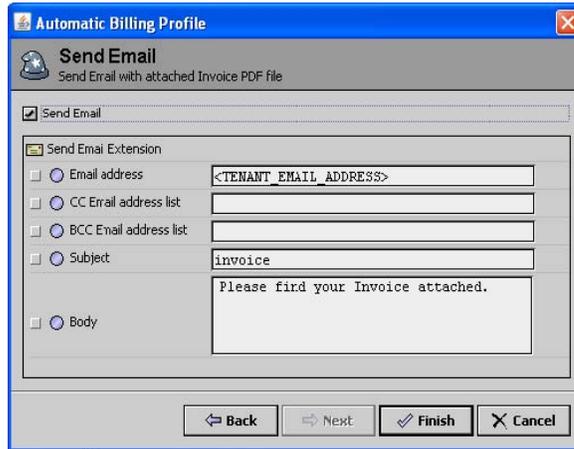


The following properties are available for configuring emails using the Vykon Tenant Billing Service:

- Email Address
  The email address of the Tenant or Owner can automatically be included in the email by using the
  <OWNER_EMAIL_ADDRESS>
  and
  <TENANT_EMAIL_ADDRESS> fields.

- 'CC Email address list' can contain a list of email addresses separated by the ";" character.
- 'BCC Email address list' can contain a list of email addresses separated by the ";" character.

# Templates

An Invoice uses a Template that refers to a special graphic page used to present the Invoice information to the Tenant.

## Template Manager View

The Template Manager view displays when a user double clicks on a Templates object. This view enables the end user to add, edit, and delete Template objects.

To view a Template, simply double click on it.

Commands
- New
  By clicking this button, a user can add new Template objects to the system. Once clicked, the user is asked how many Template objects they wish to add. Clicking OK takes the user to next dialog box of inputting the Template information.
- Edit
  By clicking this button, a user can edit the information that has been added to the system.