

“New Tenant Billing Service”

October 2008

Scott Muench - Senior Applications Engineer

James Johnson - Channel Sales Engineer

Gareth Johnson - Senior Software Developer

Welcome!

- The goal of TridiumTalk is to share with the Niagara community timely content on sales, products and technical topics. Each session will last between 45-60 minutes and will be a mix of presentation, demonstrations and Q&A.
- This session and past sessions will be posted on our community web site at www.Niagara-Central.com (more details to come)
- The content presented here is representative of Tridium's Niagara technology and products in general, please contact your channel partner for specific details and pricing.
- As a courtesy to others in the conference, please place your phone on mute until the Q&A portion of the program

Agenda

- Overview of VTBS
- Questions?

Flexible Component Modelling!

- Create and manage...
 - Owners: the person/company who owns the building
 - Tenants: the Tenant to be Invoiced
 - Contracts: defines the structure of an Invoice. References multiple Meters. Also references a Px page Template for Invoice generation
 - Utilities: the Utility company
 - Meters: references a Niagara History
- Each Meter references a Niagara History for min/max roll over, units and whether to use delta!

Manual Invoice Generation

- Manual Invoice Generation uses friendly user interface
- Save the Invoice as a PDF file
- Send an email and attach Invoice as a PDF file
- Provisioning style user interface makes creating large numbers of Invoices easy!



Tenant Billing 2 objects

| Name | Status | Description | Phone number | Contact name | Contact email | Company Logo |
|-----------------|--------|-------------|--------------------|--------------------|-------------------------------|------------------------------|
| Fred Flintstone | {ok} | The Owner | Owner Phone Number | Owner Contact Name | fredflintstone@mailinator.com | file:^images/tridiumLogo.gif |
| Ursula Platter | {ok} | Other Owner | | | ursulaplatz@mailinator.com | file:^images/niagaraLogo.gif |

Invoice Generation

Invoice Information
Please enter the Invoice details...

Start Date:

End Date:

Adjustment:

Adjustment Description:

Review old Invoices

- All financial Invoice information saved to custom Niagara History
- Review previous Invoices using the Invoice History Manager
- Intuitive user interface makes managing large numbers of Invoices easy



Tenant Billing

- Tenant Billing
 - Owners
 - Utilities
 - Invoices
 - Automatic Billing
 - Templates

Contract: Dino Flintstone {ok} TimedContract {ok}

| Invoices | | 2 Records |
|------------------------|-------------------|-----------|
| Timestamp | Invoice reference | |
| 06-Oct-08 9:40 AM BST | INV57 | |
| 28-Oct-08 10:09 AM GMT | INV59 | |

Page #

INVOICE Date: 28-Oct-08

Dino Flintstone **Account: 1**
 15 Stone Way **Billing Period: 27-Sep-08 - 27-Oct-08**
 Bedrock **Number of days: 31**
 Cave City
 RH140A **Invoice Reference: INV59**

METER CHARGES BREAKDOWN: Electric

| In hours breakdown | | |
|----------------------|-----------------------|---------------|
| Used (kilowatt hour) | Average cost per unit | Meter charges |
| 248.00 kw-hr | \$3.00 | \$744.00 |

| Out hours breakdown | | |
|----------------------|-----------------------|---------------|
| Used (kilowatt hour) | Average cost per unit | Meter charges |
| 497.00 kw-hr | \$2.00 | \$994.00 |

METER CHARGES BREAKDOWN: Water

| In hours breakdown | | |
|------------------------------|-----------------------|---------------|
| Used (cubic feet per minute) | Average cost per unit | Meter charges |
| 248.00 cfm | \$3.00 | \$744.00 |

| Out hours breakdown | | |
|------------------------------|-----------------------|---------------|
| Used (cubic feet per minute) | Average cost per unit | Meter charges |
| 497.00 cfm | \$2.00 | \$994.00 |

OTHER CHARGES BREAKDOWN

View Report Export



Invoice View

- Tenant Billing
 - Tenant Billing
 - Owners
 - Fred Flintstone
 - Henry Johnson
 - Utilities
 - Invoices
 - Automatic Billing
 - Templates

Cave City
RH140A

Invoice Reference: INV59

METER CHARGES BREAKDOWN: Electric

| | In hours breakdown | |
|----------------------|-----------------------|---------------|
| Used (kilowatt hour) | Average cost per unit | Meter charges |
| 248.00 kw-hr | \$3.00 | \$744.00 |

| | Out hours breakdown | |
|----------------------|-----------------------|---------------|
| Used (kilowatt hour) | Average cost per unit | Meter charges |
| 497.00 kw-hr | \$2.00 | \$994.00 |

METER CHARGES BREAKDOWN: Water

| | In hours breakdown | |
|------------------------------|-----------------------|---------------|
| Used (cubic feet per minute) | Average cost per unit | Meter charges |
| 248.00 cfm | \$3.00 | \$744.00 |

| | Out hours breakdown | |
|------------------------------|-----------------------|---------------|
| Used (cubic feet per minute) | Average cost per unit | Meter charges |
| 497.00 cfm | \$2.00 | \$994.00 |

OTHER CHARGES BREAKDOWN

Management Fee: \$2.00
 Facilities Fee: \$3.00
 Other: \$1.00
 Adjustment: \$0.00

Adjustment Description:

TOTAL

Tax rate percentage: 0.00
 Total: \$3482.00

Automatic Billing Profiles

- Schedule Invoices to be generated on a regular basis
- Automatically send Email with attached Invoice
- Automatically save Invoice as a PDF
- Apply Automatic Billing Profile to Owners and Tenants
- All configured using intuitive wizard based user interface



Tenant Billing

- Tenant Billing
 - Owners
 - Fred Flintstone
 - Dino Flintstone
 - TimedContract
 - Henry Johnson
 - Pickle Johnson
 - FlatRateContract
 - Utilities
 - Invoices
 - Automatic Billing
 - Default Automatic Billing Profile
 - Templates

Auto Billing Profile 1 objects

| Name | Schedule Option | Next Start Date | Next Trigger | Extensions |
|-----------------------------------|-----------------|-----------------|--------------|--|
| Default Automatic Billing Profile | No Schedule | 24-Sep-08 | null | Create Pdf Extension, Send Email Extension |

Automatic Billing Profile

Automatic Billing Schedule
 Please select a scheduling option...

Profile name:

No Schedule

Monthly

- Last week day of month
- Day of month

Custom (use advanced view to configure Schedule)

Meters

- References standard Niagara history
- Share Meters between Tenants (i.e. 50% of calculated cost between two Tenants)
- Create both Flat Rate and Timed Meters
- Flat Rate Meters
 - One Utility rate used to calculate Invoice
 - Simple and effective
- Timed Meters
 - Supports multiple rates for in and out of hours
 - Configurable rates for standard week
 - Supports special days for custom tariffs
 - Uses powerful Numeric Schedule user interface



Tenant Billing

- Tenant Billing
 - Owners
 - Fred Flintstone
 - Dino Flintstone
 - TimedContract
 - Henry Johnson
 - Pickle Johnson
 - File
 - Utilities
 - Timed Me
 - Southern
 - water
 - water
 - EDF
 - Invoices
 - Automatic Bil
 - Default A
 - Templates

Meters 2 objects

| Name | Status | Description | Meter type | Reference | History Identifier |
|---------------|--------|-----------------|------------|-----------------|---------------------------------|
| waterFlatRate | {ok} | Flat rate water | Water | %meterType.tag% | /myDevice/waterUseDeltaFalse |
| waterTimed | {ok} | Water timed | Water | %meterType.tag% | /myDevice/waterRollover100to999 |

Edit

| Name | Enabled | Description | Meter type | Reference | History Identifier | Utility Rate | Timed Meter Schedule |
|---------------|---------|-----------------|------------|-----------------|------------------------------|--------------|----------------------|
| waterFlatRate | Active | Flat rate water | Water | %meterType.tag% | /myDevice/waterUseDeltaFalse | 2.0000 {ok} | |

Name: waterFlatRate
 Enabled: Active
 Description: Flat rate water
 Meter type: Water
 Reference: %meterType.tag%
 History Identifier: myDevice / waterUseDeltaFalse
 Utility Rate: 2.0000 [0.0001 - +inf]
 Timed Meter Schedule:

OK Cancel

Graphics

- Templates for producing Invoices are Px based
- Reuses existing Niagara concepts
- SI and OEM users can easily customize Invoices
- VTBS automatically converts from Px to PDF
- Supports multi-page PDF Invoices

Designed for non-Niagara trained users

- Standard commissioning uses a series of simple wizards and manager views
- Web Applet user interface with customizable logo and background color
- Two flavors of help
 - Standard Niagara Engineer Context sensitive help
 - Simple Web help



Tenant Billing

- Tenant Billing
 - Owners
 - Fred Flintstone
 - Dino Flintstone
 - TimedContract
 - Henry Johnson
 - Pickle Johnson
 - FlatRateContract
 - Utilities
 - Timed Meter Schedules
 - Southern Water
 - waterFlatRate
 - waterTimed
 - EDF
 - Invoices
 - Automatic Billing
 - Default: Automatic Billing Profile
 - Templates

[Index](#)

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

Other features

- Niagara alarming if Invoice fails to generate (i.e. no Meter history logs)
- Contracts also have
 - Status
 - Fire Topics when an Invoice is generated
- Invoice Auditing history
- Customize web logo
- Can run on a Web Supervisor or a Jace (probably one of the only Tenant Billing Systems to run on an embedded platform)

Conclusion

- Easy Invoice generation
- Intuitive web user interface
- Flexible Meter configuration
- Invoices based upon Px for easy customization
- Review and recreate previously generated Invoices
- Released end of the year
- Beta sites required

More Information

- For more information visit <http://www.niagara-central.com>
 - Learn more about how applications by participating the community web site.

Question and Answer Session

- Select the Q&A icon in the menu bar to type your questions
- Feel free to speak up for further discussion
- Please introduce yourself, company name, and where you are calling from.

Thank you!

- We would like your feedback on today's TridiumTalk
- Please take a moment to answer our short survey
- If you have any further questions, comments or topic suggestions, please email them to SalesSupport@tridium.com



James Johnson



Gareth Johnson



Scott Muench